

RCRA FINAL PERMIT SIGN-OFF

US EPA RECORDS CENTER REGION 5



1009383

PART I. BACKGROUND

FACILITY NAME

RMI Company - Sodium PLANT

FACILITY LOCATION

Ashabula County, Ohio

RCRA ID NUMBER

OHD000810242

TYPE OF PERMIT

<input checked="" type="checkbox"/> STORAGE	<input checked="" type="checkbox"/> TREATMENT	<input type="checkbox"/> DISPOSAL
<input type="checkbox"/> Container	<input type="checkbox"/> Tank	<input type="checkbox"/> Injection Well
<input type="checkbox"/> Tank	<input type="checkbox"/> Surface Impoundment	<input type="checkbox"/> Landfill
<input checked="" type="checkbox"/> Waste Pile	<input checked="" type="checkbox"/> Incinerator	<input type="checkbox"/> Land Application
<input type="checkbox"/> Surface Impoundment	<input type="checkbox"/> Other (Detonation)	<input type="checkbox"/> Surface Impoundment

PART II. REVIEW PACKAGE CONTENT

<input checked="" type="checkbox"/> Final Permit w/Attachments	<input checked="" type="checkbox"/> Letter to Commentors
<input checked="" type="checkbox"/> Responsiveness Summary	<input checked="" type="checkbox"/> Administrative Record
<input checked="" type="checkbox"/> Letter to Applicant	

PART III. CONCURRENCES

	INITIALS	DATE	AGREE	DISAGREE
1. TECH. PERMIT CONTACT	<u>J.P.N.</u>	<u>3/13/87</u>	(<input checked="" type="checkbox"/>)	()
2. CHIEF, STATE TECHNICAL UNIT, TPS	<u>[Signature]</u>	<u>3/16/87</u>	(<input checked="" type="checkbox"/>)	()
3. TECHNICAL EXPERT (if applicable)			()	()
4. ^{cm 347} SECTION CHIEF, TPS (SWB)	<u>[Signature]</u>	<u>3/18/87</u>	(<input checked="" type="checkbox"/>)	()
5. UNIT CHIEF, RDU (PMS/SWB)	<u>[Signature]</u>	<u>3/23/87</u>	(<input checked="" type="checkbox"/>)	()
6. SECTION CHIEF, PMS (SWB)	<u>[Signature]</u>	<u>3/23</u>	(<input checked="" type="checkbox"/>)	()
7. SECRETARY, TPS (SWB)			()	()
8. ASST. REGIONAL COUNSEL (ORC)	<u>ILN</u>	<u>3-20-87</u>	(<input checked="" type="checkbox"/>)	()
9. SECTION CHIEF, SWERB (ORC)	<u>RNEM</u>	<u>3-24-87</u>	(<input checked="" type="checkbox"/>)	()
10. BRANCH CHIEF, SWERB (ORC)	<u>[Signature]</u>	<u>3-24-87</u>	(<input checked="" type="checkbox"/>)	()
11. OFFICE OF REGIONAL COUNSEL			()	()
12. SECRETARY, TPS (SWB)	<u>cm</u>	<u>3-24-87</u>	(<input checked="" type="checkbox"/>)	()
13. CONTROL CLERK, SWB			()	()
14. CHIEF, SOLID WASTE BRANCH	<u>[Signature]</u>	<u>3/24/87</u>	(<input checked="" type="checkbox"/>)	()

PART IV. APPROVAL

15. DIRECTOR, WASTE MANAGEMENT DIVISION

16. TPS, FOR MAILING

[Signature] 3/25/87 () ()

DATE MAILED

TPS-22 (03/12/87)

394-81

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

Name of Permittee: RMI Company - Sodium Plant

Facility Location: State Road and East 6th Street, Ashtabula, Ohio

EPA Identification Number: OHD 000810242

Effective Date: March 25, 1987, in accordance with 40 CFR 124.15 (b)(3).

Expiration Date: March 25, 1997

Authorized Activities

Pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 USC §6901 et seq., commonly known as RCRA), the 1984 Hazardous and Solid Waste Amendments (HSWA), and regulations promulgated thereunder by the U.S. Environmental Protection Agency (U.S. EPA) (codified and to be codified in Title 40 of the Code of Federal Regulations), a permit is issued to RMI Company-Sodium Plant (hereafter called the Permittee), to operate a hazardous waste storage and treatment facility located in Ashtabula, Ohio, on State Road and East 6th Street at latitude 41° 54'02" and longitude 80° 46' 21". You are authorized to conduct the following hazardous waste management activities:

<input checked="" type="checkbox"/> Storage:	<input checked="" type="checkbox"/> Treatment:
<input type="checkbox"/> Container	<input type="checkbox"/> Tank
<input type="checkbox"/> Tank	<input type="checkbox"/> Surface Impoundment
<input checked="" type="checkbox"/> Waste Pile	<input checked="" type="checkbox"/> Incinerator
<input type="checkbox"/> Surface Impoundment	<input type="checkbox"/> Other
<input type="checkbox"/> HSWA	

Applicable Regulations:

The conditions of this permit were developed in accordance with the applicable provisions of 40 CFR Part:

<input checked="" type="checkbox"/> 261	<input checked="" type="checkbox"/> 264, Subpart G	<input checked="" type="checkbox"/> 264, Subpart L
<input checked="" type="checkbox"/> 262	<input checked="" type="checkbox"/> 264, Subpart H	<input type="checkbox"/> 264, Subpart M
<input checked="" type="checkbox"/> 264, Subpart A-E	<input type="checkbox"/> 264, Subpart I	<input type="checkbox"/> 264, Subpart N
<input type="checkbox"/> 264, Subpart F	<input type="checkbox"/> 264, Subpart J	<input checked="" type="checkbox"/> 264, Subpart O
<input checked="" type="checkbox"/> HSWA	<input type="checkbox"/> 264, Subpart K	<input checked="" type="checkbox"/> 270

394-81

Permit Approval

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (including those in any attachments) and the applicable regulations contained in 40 CFR Parts 260 through 264 and 270 and 124 as specified in the permit, and relevant provisions of HSWA. Applicable regulations are those which are in effect on the date of issuance of this permit (See 40 CFR §270.32(c)).

This permit is based on the assumption that the information submitted in the permit application attached to the Permittee's letter dated November 7, 1985, and any subsequent amendments (hereafter referred to as the application) is accurate and that the facility is constructed and will be operated as specified in the application. Any inaccuracies found in this information may be grounds for the termination or modification of this permit, in accordance with 40 CFR §270.41, §270.42 and §270.43, and potential enforcement action. The Permittee must inform U.S. EPA of any deviation from or changes in the information in the application or in the permittee's knowledge of solid waste management units and/or releases which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

This permit is effective as of 25 MAR 1987, and shall remain in effect until March 25, 1997 unless revoked and reissued, or terminated (40 CFR §270.41 and .43 and HSWA) or continued in accordance with 40 CFR §270.51.

Issued this 25th day of March, 1987

by 
Basil G. Constantelos, Director
Waste Management Division

RMI Company-Sodium PlantPERMIT INDEX

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HAZARDOUS WASTE MANAGEMENT PERMIT
ATTACHMENT I
PERMIT CONDITIONS

RMI COMPANY-SODIUM PLANT
U.S. EPA FACILITY I.D. #OHD 000810242

I. STANDARD CONDITIONS

A. EFFECT OF PERMIT

The Permittee is allowed to store and treat hazardous waste in accordance with the conditions of this permit. Any storage or treatment of hazardous waste not authorized in this permit, the RCRA regulations, or HSWA is prohibited. Compliance with this permit constitutes compliance, for purposes of enforcement, with Subtitle C of RCRA. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under Section 3013 or Section 7003 of RCRA, Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, commonly known as CERCLA (42 U.S.C. 9606(a)), or any other law providing for protection of public health or the environment.

B. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR §270.41, §270.42, and §270.43. This permit may also be reviewed and modified at any time by the U.S. EPA with consideration of improvements in the state of control and measurement technology and to include any terms and conditions determined necessary to protect human health and the environment pursuant to HSWA 3005(b)(3). The filing of a request for a permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition.

C. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or if the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

D. DUTIES AND REQUIREMENTS

1. Duty to Comply. The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of RCRA and is grounds for enforcement action, permit termination, revocation and reissuance, modification, denial of a permit renewal application, or other appropriate action.

2. Duty to Reapply. If the Permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the Permittee shall submit a complete application for a new permit at least 180 days before this permit expires.
3. Permit Expiration. The duration of this permit shall be ten (10) years from the effective date of this permit, in conformance with the provisions of 40 CFR §270.50. This permit and all conditions herein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application (see 40 CFR §270.13-§270.29) and through no fault of the Permittee the Regional Administrator has not issued a new permit as set forth in 40 CFR §270.51.
4. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
5. Duty to Mitigate. The Permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.
6. Proper Operation and Maintenance. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facility or similar systems only when necessary to achieve compliance with the conditions of the permit.
7. Duty to Provide Information. The Permittee shall furnish to the Regional Administrator, within the time designated by the Regional Administrator, any relevant information which the Regional Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Regional Administrator, upon request, copies of records required to be kept by this permit.
8. Inspection and Entry. The Permittee shall allow the Regional Administrator, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:
 - (a) Enter at reasonable times upon the Permittee's premises where a regulated activity is located or conducted, or where records must be kept under the conditions of this permit;

- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- (d) Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by RCRA, any substances or parameters at any location.

9. Monitoring and Records.

- (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of 40 CFR Part 261. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/ Chemical Methods, U.S. EPA document SW-846, June 1982; Standard Methods of Wastewater Analysis, 1980, or an equivalent method as specified in the attached Waste Analysis Plan, Attachment II.
- (b) The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report or record. These periods may be extended by request of the Regional Administrator at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility.
- (c) Records of monitoring information shall specify:
 - (i) The dates, exact place, method, and times of sampling or measurements;
 - (ii) The individuals who performed the sampling or measurements;
 - (iii) The dates analyses were performed;
 - (iv) The individuals who performed the analyses;
 - (v) The analytical techniques or methods used; and
 - (vi) The results of such analyses.

10. Reporting Planned Changes. The Permittee shall give notice to the Regional Administrator as soon as possible of any planned physical alterations or additions to the permitted facility.
11. Certification of Construction or Modification. The Permittee may not commence storage or treatment of hazardous waste at modified or newly constructed storage areas at the facility until:
 - (a) The Permittee has submitted to the Regional Administrator by certified mail or hand delivery, a letter signed by the Permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and
 - (b)
 - (i) The Regional Administrator has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or
 - (ii) The Regional Administrator has either waived the inspection or has not within 15 days notified the Permittee of his or her intent to inspect.
12. Anticipated Noncompliance. The Permittee shall give advance notice to the Regional Administrator of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. Such notice does not constitute a waiver of the Permittee's duty to comply with permit requirements.
13. Transfer of Permits. This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to 40 CFR §270.41(b)(2) or §270.42(d). Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator in writing of the requirements of 40 CFR Parts 264 and 270, and all applicable corrective action requirements.
14. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
15. Twenty-four Hour Reporting. The Permittee shall report to the Regional Administrator any noncompliance with the permit which may endanger health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances. This report shall include the following:
 - (a) Information concerning the release of any hazardous waste which may endanger public drinking water supplies.

- (b) Information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, which could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:
- (i) Name, address, and telephone number of the owner or operator;
 - (ii) Name, address, and telephone number of the facility;
 - (iii) Date, time, and type of incident;
 - (iv) Name and quantity of materials involved;
 - (v) The extent of injuries, if any;
 - (vi) An assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable; and
 - (vii) Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the periods of noncompliance (including exact dates and times); steps taken to minimize impact on the environment; whether the noncompliance has been corrected; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Permittee need not comply with the five day written notice requirement if the Regional Administrator waives the requirement and the Permittee submits a written report within fifteen days of the time the Permittee becomes aware of the circumstances.

16. Other Noncompliance. The Permittee shall report all other instances of noncompliance not otherwise required to be reported above, at the time monitoring reports, as required by this permit, are submitted. The reports shall contain the information listed in condition I.D.15.
17. Other Information. Whenever the Permittee becomes aware that he failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Regional Administrator, the Permittee shall promptly submit such facts or information.

18. Submittal of Reports or Other Information. All reports or other information required to be submitted by the terms of this permit shall be sent to:

RCRA Activities
U.S. EPA, Region V
Post Office Box A-3587
Chicago, Illinois 60690-3587

- E. Signatory Requirement. All reports or other information requested by the Regional Administrator shall be signed and certified as required by 40 CFR §270.11.
- F. Confidential Information. The Permittee may claim confidential any information required to be submitted by this permit in accordance with 40 CFR §270.12.
- G. Documents To Be Submitted Prior To Operation. (Not Applicable.)
- H. Documents To Be Maintained at Facility Site. The Permittee shall maintain at the facility, until closure is completed and certified by an independent registered professional engineer, the following documents and amendments, revisions and modifications to these documents:
1. Waste analysis plan as required by 40 CFR §264.13 and this permit.
 2. Inspection schedules as required by 40 CFR §264.15(b) and this permit.
 3. Personnel training documents and records as required by 40 CFR §264.16(d) and this permit.
 4. Contingency plan as required by 40 CFR §264.53(a) and this permit.
 5. Closure plan as required by 40 CFR §264.112(a) and this permit.
 6. Cost estimate for facility closure as required by 40 CFR §264.142(d) and this permit.
 7. Operating record as required by 40 CFR §264.73 and this permit.

II. GENERAL FACILITY CONDITIONS

- A. Design and Operation of Facility. The Permittee shall maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or nonsudden release of hazardous waste constituents to air, soil, ground water or surface water which could threaten human health or the environment.
- B. Required Notice. (Not Applicable.)
- C. General Waste Analysis. The Permittee shall follow the procedures described in the attached waste analysis plan, Attachment II.
- D. Security. The Permittee shall comply with the security provisions of 40 CFR §264.14(b) and (c).
- E. General Inspection Requirements. The Permittee shall follow the inspection schedule, Attachment III. The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by 40 CFR §264.15(c). Records of inspections shall be kept as required by 40 CFR §264.15(d).
- F. Personnel Training. The Permittee shall conduct personnel training as required by 40 CFR §264.16. This training program shall follow the attached outline, Attachment IV. The Permittee shall maintain training documents and records as required by 40 CFR §264.16(d) and (e).
- G. General Requirements for Ignitable, Reactive, or Incompatible Waste. The Permittee shall comply with the requirements of 40 CFR §264.17(a).
- H. Location Standards. The facility is not located in a flood plain as described in 40 CFR §270.14.
- I. Preparedness and Prevention
1. Required Equipment. At a minimum, the Permittee shall equip the facility with the equipment set forth in the contingency plan, Attachment V, as required by 40 CFR §264.32.
 2. Testing and Maintenance of Equipment. The Permittee shall test and maintain the equipment specified in the previous permit condition as necessary to assure its proper operation in time of emergency. The maintenance and inspection of equipment shall be conducted in accordance with the Inspection Schedule, Attachment III.

3. Access to Communications or Alarm System. The Permittee shall maintain access to the communications or alarm system as required by 40 CFR §264.34.
4. Required Aisle Space. (Not applicable.)
5. Arrangements with Local Authorities. The Permittee shall attempt to make arrangements with State and local authorities as required by 40 CFR §264.37. If State or local officials refuse to enter into preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record.

J. Contingency Plan.

1. Implementation of Plan. The Permittee shall immediately carry out the provisions of the contingency plan, Attachment V, and follow the emergency procedures described by 40 CFR §264.56 whenever there is a fire, explosion, or release of hazardous waste or constituents which threatens or could threaten human health or the environment.
2. Copies of Plan. The Permittee shall comply with the requirements of 40 CFR §264.53.
3. Amendments to Plan. The Permittee shall review and immediately amend, if necessary, the contingency plan, as required by 40 CFR §264.54.
4. Emergency Coordinator. The Permittee shall comply with the requirements of 40 CFR §264.55, concerning the emergency coordinator.

K. Manifest System. The Permittee shall comply with the manifest requirements of 40 CFR 262 revised pursuant to HSWA.

L. Recordkeeping and Reporting.

1. Operating Record. The Permittee shall maintain a written operating record at the facility in accordance with 40 CFR §264.73(a), (b)(1), (2), (3), (4), (5), and (8).
2. Biennial Report. The Permittee shall comply with the biennial report requirements of 40 CFR §264.75.

M. Closure.

1. Performance Standard. The Permittee shall close the facility as required by 40 CFR §264.111 and in accordance with the closure plan, Attachment VI.
2. Amendment to Closure Plan. The Permittee shall amend the closure plan in accordance with 40 CFR §264.112(b) whenever necessary.

3. Notification of Closure. The Permittee shall notify the Regional Administrator at least 180 days prior to the date he expects to begin closure.
 4. Time Allowed For Closure. After receiving the final volume of hazardous waste, the Permittee shall remove from the site all hazardous waste in accordance with the schedule specified in the closure plan, Attachment VI. After receiving the final volume of hazardous waste, the Permittee shall complete closure activities in accordance with the schedule specified in the closure plan, Attachment VI.
 5. Disposal and/or Decontamination of Equipment. The Permittee shall decontaminate and/or dispose of all facility equipment as required by 40 CFR §264.114 and the closure plan, Attachment VI.
 6. Certification of Closure. When closure is completed, the Permittee shall certify that the facility has been closed in accordance with the specifications in the closure plan, Attachment VI, as required by 40 CFR §264.115.
- N. Cost Estimate for Facility Closure. The Permittee's original closure cost estimate, prepared in accordance with 40 CFR §264.142(a), is specified in Attachment VI.
1. The Permittee must adjust the closure cost estimate for inflation within 30 days after each anniversary of the date on which the first closure cost estimate was prepared, as required by 40 CFR §264.142(b).
 2. The Permittee must revise the closure cost estimate whenever there is a change in the facility's closure plan, as required by 40 CFR §264.142(c).
 3. The Permittee must keep at the facility the latest closure cost estimate, as required by 40 CFR §264.142(d).
- O. Cost Estimate for Completion of Corrective Action. Upon completion of the activities required under Condition IV.B, the Permittee shall prepare a cost estimate for the completion of any corrective action required under this permit for solid waste management units in order to provide financial assurance for completion of corrective action as required under 40 CFR §264.101(b). Such cost estimate will be based upon the cost of operation, inspection, monitoring, and maintenance of the corrective action system to meet the requirements of 40 CFR §264.101 and this permit. This cost estimate will be submitted to the U.S. EPA on the due date for Corrective Measures Plan, to be submitted under Condition IV.C.3.

- P. Financial Assurance for Facility Closure. The Permittee shall demonstrate continuous compliance with 40 CFR §264.143 by providing documentation of financial assurance as required by 40 CFR 151, in at least the amount of the cost estimates required by permit condition II.N. Changes in financial assurance mechanisms must be approved by the Regional Administrator pursuant to 40 CFR §264.143.
- O. Financial Assurance for Corrective Action.
1. The Permittee shall demonstrate continuous compliance with 40 CFR §264.101 by providing documentation of financial assurance using a mechanism specified in 40 CFR §264.151, in at least the amount of the cost estimate required under Condition II.O. The words "completion of corrective action" shall be substituted for "closure and/or post closure" as appropriate in the financial mechanism. The documentation shall be submitted to the U.S. EPA within 60 days after approval of the Corrective Measures Plan.
 2. The Regional Administrator may accept financial assurance for completion of corrective action in combination with another financial mechanism that is acceptable under 40 CFR §§264.146, and/or 264.149 at his discretion.
- R. Liability Requirements. The Permittee shall demonstrate continuous compliance with 40 CFR §264.147 and the documentation requirements of 40 CFR §264.151, including the requirements to have and maintain liability coverage for sudden and accidental occurrences in the amount of at least \$1 million per occurrence with an annual aggregate of at least \$2 million, exclusive of legal defense costs.
- S. Incapacity of Owners or Operators, Guarantors, or Financial Institutions. The Permittee shall comply with 40 CFR §264.148 whenever necessary.
- T. Financial Assurance and Documentation Requirements.
1. Where the requirements of 40 CFR §264.143 and §264.147 are met through the use of State-required mechanism pursuant to §264.149, documentation shall be made out to the Director of Solid and Hazardous Waste Management Division, Ohio Environmental Protection Agency, 361 East Broad Street, Columbus, Ohio 43216. Copies shall be submitted to U.S. EPA, Region V office at the address specified in condition I.D.18.
 2. In all other instances, documents shall be made out to the Regional Administrator, and original documents shall be submitted to U.S. EPA, Region V office.

U. Waste Minimization Plan

The Permittee must certify at least annually that the volume and toxicity of the waste generated has been reduced to the degree that the Permittee has determined to be economically practicable, and that the Permittee has selected that practicable method of treatment, storage, or disposal currently available to the Permittee which minimizes the present and future threat to human health and the environment, pursuant to 40 CFR §264.73(b)(9).

III. STORAGE IN WASTE PILE

- A. Waste Identification. The Permittee may store the following hazardous waste in the enclosed waste pile designated as the "Scrap Bin" in Attachment VII (also known as the "inner containment structure"), subject to the terms of this permit:

D005, D006, D008 - Cell bath waste resulting from Downs Electrolytic Process, which exhibits the characteristic of Extraction Procedure (EP) toxicity due to contamination with barium, cadmium, or lead.

The Permittee shall not store an amount of waste greater than 40 cubic yards in the pile at any time.

- B. Design and Operating Requirements. The Permittee must operate and maintain the waste pile in a manner that ensures the following, as required by 40 CFR §264.250(c):
1. Liquids or materials containing free liquids are not placed in the pile at any time;
 2. The pile is protected from any surface water run-on;
 3. The pile is protected from wind dispersal at all times, by being completely enclosed by the physical structure described in Attachment VII; and
 4. The pile will not generate leachate through decomposition or other reactions.
- C. Monitoring and Inspection. The Permittee shall follow the inspection schedule in Attachment III, as required by 40 CFR §264.15(a) and §264.254.
- D. Special Requirements for Ignitable or Reactive Wastes. The Permittee shall not store ignitable or reactive waste in the waste pile.
- E. Special Requirements for Incompatible Wastes. The Permittee shall store, in the waste pile, only wastes which are mutually compatible.
- F. Closure. The Permittee shall close the waste pile in accordance with the closure plan in Attachment VI, as required by 40 CFR §264.258(a).

IV. INCINERATION

A. Partial Exemption.

Pursuant to 40 CFR §264.340(c), the Permittee shall be exempt from all requirements of 40 CFR Subpart O, except 40 CFR §264.341 (Waste Analysis) and §264.351 (Closure), if the conditions in IV.B.1 and IV.B.2 are met. This partial exemption may be modified or this permit may be revoked by the Regional Administrator if U.S. EPA determines at any time that the Permittee's incinerator is not in compliance with applicable requirements under the Clean Air Act, as amended, 42 U.S.C. §7401 et seq.

B. Waste Identification.

1. The Permittee shall incinerate only the following reactive hazardous wastes as defined in 40 CFR §261.23(a) in the incinerator unit (also designated as the "burning room" in Attachment VIII):

D003 - Waste sodium product and sodium/calcium sludge from sodium handling equipment. This waste exhibits the characteristics of reactivity per 40 CFR §261.23(a)(1), (2), (3), (6), (7) or (8).

No wastes containing more than 150 parts per million of barium shall be incinerated. No wastes containing more than 100 parts per million of any of the other hazardous constituents listed in 40 CFR Part 261, Appendix VIII, shall be incinerated.

2. The Permittee shall monitor and analyze the incinerator waste feed in accordance with the methods and procedures specified in Attachment II, to ensure compliance with Condition IV.B.1.

C. Incinerator Closure.

The Permittee shall close the incinerator in accordance with the closure plan in Attachment VI, as required by 40 CFR §264.351.

V. CORRECTIVE ACTION FOR SOLID WASTE MANAGEMENT UNITS (SWMUs)

A. General.

The Permittee shall institute corrective action as necessary to protect human health and the environment for all releases of hazardous waste or hazardous constituents from any solid waste management unit, regardless of the time at which waste was placed in the unit. The schedules for compliance for such corrective action and assurances of financial responsibility for completing such corrective action are as described below.

B. RCRA Facility Investigation Plan

1. Development of RCRA Facility Investigation Plan. The Permittee shall submit a RCRA Facility Investigation Plan (including a proposed schedule for completion of the investigation) for each solid waste management unit identified in Attachment IX. The Plan must be submitted to the Regional Administrator within 60 days of the effective date of the permit. Following review of the Plan by U.S. EPA, the Permittee will be notified as to any corrections and/or modifications which must be made to the Plan. The Permittee shall then have 30 days from such notification within which to make such corrections and/or modifications and resubmit the Plan. The Permittee will implement the plan in accordance with the schedule and conditions set forth in the Plan within 15 days of receiving written approval by the Regional Administrator.
2. Contents of RCRA Facility Investigation Plan. For those solid waste management units identified in Attachment IX, the RCRA Facility Investigation Plan will contain a sampling plan which describes the methods that the Permittee will use to confirm clearly the presence or absence of a release or releases, and to determine the nature and extent of the release or releases. The RCRA Facility Investigation Plan will also include a quality assurance/quality control plan for sampling and analysis.
3. Documentation for SWMUs. Within 60 days of the effective date of the permit, the Permittee may submit adequate documentation in lieu of a RCRA Facility Investigation Plan for a unit, if the nature and extent of the release or releases are known and can be clearly demonstrated to the Regional Administrator. The Regional Administrator may require that a RCRA Facility Investigation Plan be submitted, if the documentation submitted is deemed inadequate.

4. Submittal of RCRA Facility Investigation Progress Reports and Final Results. During the course of the RCRA Facility Investigation, progress reports shall be submitted to the Regional Administrator in accordance with the schedule in the approved plan. The results of the RCRA Facility Investigation shall also be submitted to the Regional Administrator in accordance with the schedules in the approved plan. The results of the unit investigations must contain information including, but not limited to, all relevant supporting documentation and data used in implementation of the investigation plan. All units at the facility identified as having continuing or prior releases of hazardous waste or hazardous constituents are subject to corrective action as specified in condition V.C.1, and as required under 40 CFR 264.101.
5. Additional Solid Waste Management Units. If additional solid waste management units are discovered during the course of the RCRA Facility Investigation, the Permittee shall submit a RCRA Facility Investigation Plan for such units.

C. Corrective Measures.

1. Determination of the Need for Corrective Measures. Upon review of the RCRA Facility Investigation Plan results, the Regional Administrator, in consultation with the Ohio EPA, shall determine which solid waste management units require corrective measures. The Regional Administrator will notify the Permittee of this decision.
2. Development of Corrective Measures Plan. Within 60 days of receiving the notification pursuant to Condition V.C.1, the Permittee shall develop and submit to the Regional Administrator a Corrective Measures Plan for each solid waste management unit at the facility from which a continuing or prior release of hazardous wastes or hazardous constituents has occurred. The Plan will contain a cost estimate and projected schedules for implementation and completion of corrective measures and for interim milestone activities. If the time necessary for implementation exceeds one year, the schedule shall specify interim dates for the submission of progress reports. The Plan will also provide assurances of financial responsibility for completing such corrective measures. The Corrective Measures Plan submitted under this condition shall meet the requirements of 40 CFR 264.101 as is necessary to protect public health and the environment.
3. Revisions to Corrective Measures Plan. Following review of the Plan by U.S. EPA, the Permittee will be notified as to any corrections and/or modifications which must be made to the Plan. The Permittee shall revise the Corrective Measures Plan as necessary and resubmit the plan on or before the date specified by the Regional Administrator.
4. Implementation of Plan. The Permittee shall implement the Corrective Measures Plan(s) within 60 days after approval by the Regional Administrator of the Plan. Within 30 days after completion of the corrective measures, the Permittee shall submit a letter, signed by the Permittee and an independent registered professional engineer certifying that the corrective measures has been completed in accordance with the approved Corrective Measures Plan.

HAZARDOUS WASTE MANAGEMENT PERMIT
ATTACHMENT II
WASTE ANALYSIS PLAN

RMI COMPANY-SODIUM PLANT
U.S. EPA FACILITY I.D. #OHD 000810242

C WASTE CHARACTERISTICS

The information provided in this section is submitted in accordance with the requirements of 270.14(b), 264.13(a), 264.13(b), 261 Appendix I, and 264.250(c)(1).

The section supplies a description of the waste, the hazard characteristics of the material and the basis for the hazard designation. The waste analysis plan which shows the parameters chosen for analysis and the rationale for their selection, sampling and test methods, and frequency of analysis are also included. Furthermore, documentation of the absence of free liquids is also presented in order to request a waiver from waste pile requirements.

C-1 & C-2 Chemical and Physical Analyses and Waste Analysis Plan

The only wastes placed in the south chute are overflow material from the Downs Cells which has fallen onto the floor of the cell room and the same type waste (cell bath) generated during cell maintenance. The overflow waste is contaminated with a clay type material called Speedy Dri (R).

Since the commercial clay material is known to be nonhazardous, the only constituents of concern are identical in both waste streams. The concentration range of the major constituents of the cell bath have been established. The process requires a cell bath with the following composition:

Sodium Chloride	37%
Calcium Chloride	60%
Barium Chloride	3%

The waste has three components:

	<u>Range</u>
Cell Bath	30 - 60%
Clay	15 - 30%
Water	10 - 45%

Apparently heavy metal contaminants do concentrate in the cell over time, thus elevating the heavy metal content in the waste. For this reason all EP Toxic Metals are monitored.

C-2

Analytical characterization of the waste is given in Tables C-1, C-2, C-3, C-4, and C-5.

Based on knowledge and/or analysis, the following statements can be made:

- (a.) The waste is not a listed hazardous waste as defined in 40 CFR § 261.30.
- (b.) The waste is not a characteristic ignitable hazardous waste as defined in 40 CFR § 261.21.
- (c.) The waste is not a characteristic corrosive hazardous waste as defined in 40 CFR § 261.22.
- (d.) The waste is not a characteristic reactive hazardous waste as defined in 40 CFR § 261.23.
- (e.) The waste is a characteristic EP toxic hazardous waste as defined in 40 CFR § 261.24. The waste contains barium (D0005), cadmium (D006), and lead (D008).

The above statements will remain true as long as the process and quality of the feedstock are not changed. However, to prove the characterization of the waste has not changed, a representative sample will be analyzed for specific EP toxic metals on an annual basis. Additional samples will be taken in the unlikely event the process or specifications of the feedstock are changed.

Methods used for characterizing the waste are given below:

- (a.) EP toxic metals - EP Toxicity Test Procedure, 40 CFR § 261 Appendix II.
- (b.) Total concentration of specific metals - EPA SW-846 methods, 40 CFR § 261 Appendix III.
 - (i) Arsenic 7060, 7061 (annual)
 - (ii) Barium 7080, 7081 (annual)
 - (iii) Cadmium 7090, 7091 (annual)
 - (iv) Chromium 7190, 7191 (annual)
 - (v) Lead 7420, 7421 (annual)

C-2a

- (vi) Mercury 7470, 7471 (annual)
- (vii) Selenium 7740, 7741 (annual)
- (viii) Silver 7760, 7761 (annual)

C-3

Method for sampling the waste is based on Test Method for Evaluating Solid Waste, SW-846; Method 1.2.1.5. Specific sampling method is given below:

Based on the size of the pile, the surface of the pile is marked off into a grid of six to eight parts. Using an Oakfield Tube Sampler, a 2 inch diameter, six inch long core sample is removed from each section of the grid. The samples are placed in a clean five gallon plastic pail and mixed until visibly homogeneous using a plastic paddle. A one liter composite sample is taken for analysis.

SPECIAL NOTE: The cell bath waste does not contain free liquids before, during, or upon removal from the south chute. Liquids are not added to the waste and the structure sheltering the waste is so constructed that the material is protected from precipitation and run on. Due to the nature of the waste coupled with the nature of operation, no leachate can be generated while in storage. Water content is limited to atmospheric moisture (humidity) which is absorbed by the calcium chloride. As noted earlier, moisture content is in the range of 10 to 45%. (Analytical Reference: EPA 600/4-79-020, Method 160.3.) A paint filter test was performed on the cell bath waste in accordance with Test Methods for Evaluating Solid Wastes, EPA No. SW846, Method No. 9095. The material does not contain free liquid as determined by the test. A paint filter test will be conducted annually to confirm the absence of free liquids.

Characterization of Sodium/Calcium Sludge

The various streams which contribute to the waste sodium and sodium/calcium sludge are:

- Sodium Product (usually in valves)
- Sodium/Calcium Sludge in "Sludge Barrels"
- Sodium/Calcium Sludge in "Containers"
- Sodium/Calcium Sludge in "Receivers"

An effort will be made to take a sample which is as representative as possible, without endangering the person taking the sample. A container or receiver will be selected at random for sampling. It will be heated until its contents become molten. A six ounce carbon steel ladle will be used to obtain a molten sample of the sodium product or the Na/Ca sludge from the container or receiver. The sampling point within the container or receiver will be selected at random. This sample is poured into a 1" x 1" x 6" carbon steel mold, allowed to cool, then transferred to a clean one quart glass jar with a screw top lid, for delivery to a laboratory. Due to the reactive nature of the waste, the standard extraction procedure can not be utilized. Samples are dissolved to a 20:1 ratio at a rate of 50 grams per liter in 80% methanol/20% water or 100% methanol to allow the sodium to react under controlled conditions. The resulting metal methylete solutions are analyzed for the following as total metal:

o sodium 273.1 (1)	o chromium 7190 (2)
o calcium 215.1 (1)	o lead 7420 (2)
o arsenic 7061 (2)	o mercury 7470 (2)
o barium 7080 (2)	o selenium 7741 (2)
o cadmium 7090 (2)	o silver 7760 (2)

The analysis for trace metals in the sub-part per million range is not readily accomplishable. Even with matrix matching, ion suppression, and use of standard additions, analytical results at low levels are questionable. Based on current knowledge and/or analysis, the following statements can be made:

- (a) The waste is not a listed hazardous waste as defined in 40 CFR §261.30.
- (b) The waste is not a characteristic ignitable hazardous waste as defined in 40 CFR §261.21.
- (c) The waste is not a characteristic corrosive hazardous waste as defined in 40 CFR §261.22.
- (d) The waste is characteristic reactive hazardous waste as defined in 40 CFR §261.23. Both sodium and calcium react violently with water.
- (e) The waste is not a characteristic EP toxic hazardous waste as defined in 40 CFR §261.24.

HAZARDOUS WASTE MANAGEMENT PERMIT
ATTACHMENT III
INSPECTION PLAN

RMI COMPANY-SODIUM PLANT
U.S. EPA FACILITY I.D. #OHD 000810242

EXHIBIT F-2. Equipment Inspection Schedule Form (Monthly/After Each Use)

DATE AND TIME _____

INSPECTOR'S NAME _____

REVIEWED BY: Manager, Sodium Production _____ (Title) _____ (Date of Review)

("Reviewed By" is not applicable if Manager, Sodium Production performs inspection.)

INSPECTION ITEM	POTENTIAL PROBLEMS	STATUS (Acceptable or Unacceptable)	REMARKS OR OBSERVATIONS	REMEDIAL ACTIONS NECESSARY	DATE REMEDIAL ACTIONS PERFORMED
Scott Air Packs*	Depleted air supply, inoperable air delivery system, moisture in tank (cold weather).				
Salt/ Soda Ash*	Less than 250 lbs., wet bags, material caked, damaged bags.				

* Indicates inspection after each use.

EXHIBIT F-2. Equipment Inspection Schedule Form (Monthly/After Each Use)

(continued)

INSPECTION ITEM	POTENTIAL PROBLEMS	STATUS (Acceptable or Unacceptable)	REMARKS OR OBSERVATIONS	REMEDIAL ACTIONS NECESSARY	DATE REMEDIAL ACTIONS PERFORMED
Communication Equipment (Telephones in C.P. Area and Evaporator Area)	Difficult to access, inoperable.				
Fire Extinguisher in C.P. Area*	Extinguisher missing from area, extinguisher damaged, in need of recharging, difficult to access.				
Fire Extinguisher in Evaporator Area*	Extinguisher missing from area, extinguisher damaged, in need of recharging, difficult to access.				

* Indicates inspection after each use.

EXHIBIT F-3. Hazardous Waste Pile Inspection Form (Daily - When in use.)

AREA _____

DATE AND TIME _____

INSPECTOR'S NAME _____

REVIEWED BY: _____
Manager, Sodium Production

AUDITED BY: _____
Project Engineer

("Reviewed By" is not applicable if Manager, Sodium Production performs inspection.)

INSPECTION ITEM	POTENTIAL PROBLEMS	STATUS (Acceptable or Unacceptable)	REMARKS OR OBSERVATIONS	REMEDIAL ACTIONS NECESSARY	DATE REMEDIAL ACTIONS PERFORMED
Waste Pile Structure	General damage; cracks, leaking roof, erosion or deterioration of floor, walls, or entrance dike.				
Unacceptable Material	Presence of water; presence of metal, wood, or synthetic debris; presence of salt, chlorine duct sludge, or other non-cell bath wastes.				
Surrounding Area	Presence of activities which could result in the inadver- tent placement of liquids onto the pile. Presence of cell bath waste on the ground outside the pile.				

EXHIBIT F-4. Hazardous Waste Burning Room Inspection Form (Weekly)

AREA _____

DATE AND TIME _____

INSPECTOR'S NAME _____

REVIEWED BY: _____
 Manager, Sodium Production

AUDITED BY: _____
 Project Engineer

("Reviewed By" is not applicable if Manager, Sodium Production performs inspection.)

INSPECTION ITEM	POTENTIAL PROBLEMS	STATUS (Acceptable or Unacceptable)	REMARKS OR OBSERVATIONS	REMEDIAL ACTIONS NECESSARY	DATE REMEDIAL ACTIONS PERFORMED
Adequate Aisle Space	Materials stored in New Tank Wash Area.				
Broom and Shovel in Wash Tank Area	Equipment absent or nonfunctional.				
Brooms and Shovels in Day Service Area	Equipment absent or nonfunctional.				
Burning Room and Wash Tank Area	General damage; cracks uneven settlement or erosion of floor or walls, fit and oper- ation of door.				

EXHIBIT F-4. Hazardous Waste Burning Room Inspection Form (Weekly)

(continued)

INSPECTION ITEM	POTENTIAL PROBLEMS	STATUS (Acceptable or Unacceptable)	REMARKS OR OBSERVATIONS	REMEDIAL ACTIONS NECESSARY	DATE REMEDIAL ACTIONS PERFORMED
Unacceptable Material	Presence of containers of garbage or refuse in Burning Room or Wash Tank Area; presence of nonwaste containers; presence of equipment or materials that are not supposed to be in the area.				
Monorail, Cart & Tracks	Mechanical deficiencies in hoist, loose bolts, worn or damaged flanges.				
Fan, Air Quality Control Equipment	Bearings need replacing, fan unbalanced, lack of water to scrubber, mal- functioning instrumenta- tion, malfunctioning valves, corrosion or deterioration.				
Torches, Burning Utensils	Bent or damaged torches or utensils, clogged torch head, leaking or damaged hoses.				

HAZARDOUS WASTE MANAGEMENT PERMIT
ATTACHMENT IV
PERSONNEL TRAINING PLAN

RMI COMPANY-SODIUM PLANT
U.S. EPA FACILITY I.D. #OHD 000810242

H-1

H PERSONNEL TRAINING

H-1 Outline of Training Program

H-1a Job Titles and Duties

Job descriptions for employees involved in the handling of hazardous wastes are given in Exhibits H-1 through H-9 at the end of this section.

As positions are available at the plant, employees "bid" for the opportunity to fill the vacant position. Only an experienced (more than five years at the plant) employees fill the positions which involve handling hazardous waste. All employees that work with hazardous waste have spent years working in the cell room where the products are manufactured; thus becoming very familiar with sodium, chlorine, and cell bath. Therefore they will have already received class room instruction and on the job training, as well as have participated in numerous health and safety meetings prior to advancing to the position where the waste is handled.

Lastly, personnel records of the individual hourly employee show the jobs he is qualified to perform, as well as the training he has received, but not a description of the job he currently performs.

H-1b A comprehensive hazardous waste management training program has been developed for RMISP. The Training Director will conduct/or oversee the introductory and continuing training programs for all personnel working with hazardous wastes. On-the-job training will also constitute a portion of the program. Health and Safety Meetings will be utilized to round out the training process. The content of the introductory program is given once to all employees working with hazardous waste. This program is outlined in Exhibit H-10. The continuing training program is performed annually and includes review of state and federal regulations, special training for hazardous wastes, different handling techniques, and an overview of the plant's crisis management and emergency procedure plans. Regular in-plant Health and Safety Meetings are conducted monthly and address specific aspects of the crisis management and emergency procedure plans as well as health and safety problems.

H-1a

H-1c Training Director

The duties of Training Director will be a part-time assignment for a representative of RMI Company management. This person will have a complete knowledge and understanding of pertinent hazardous waste regulations as they apply to RMISP and be thoroughly familiar with plant operations as a whole. The training director will participate in the selection of training materials and will communicate the spirit and specifics of the training program to plant management and any designated trainers. In addition, the Training Director will annually attend one or more applicable Hazardous Material Conferences or seminars.

Mr. Joe Holman, Supervisor-Environmental Control, RMI Company is the Training Director for RMI Company-Sodium Plant. Mr. Holman holds a B.S. in Chemistry and Physics and has 20 years experience in analytical and environmental chemistry (see job description). He is familiar with current hazardous regulations and attends conferences and seminars for review and update on hazardous waste management.

H-1d Relevance of Training to Job Position

The degree of training that personnel receives is based on the employee's position and level of responsibility. All personnel receive training in safe operational procedures, hazardous waste management, and emergency response. Supervisory personnel receive additional training in recordkeeping, inspection requirements, and procedures required for compliance.

H-1e Training for Emergency Response

The formal training program will ensure that personnel not only handle hazardous wastes in a safe manner but also properly respond to crisis/emergency situations. The Emergency Response Training Program at the Sodium Plant includes all of the relevant elements of the Crisis Management and Emergency/Procedures Plans presented in Section G of this permit application. An outline detailing the Emergency Response Training Program is provided in Exhibit H-10. The outline covers:

An overview of the Crisis Management and Emergency Procedures Plans;

Communications and alarm systems;

Response to fires;

Response to chlorine release;

Response to spills of liquids and solids (including: acids, oil, sodium, and cell bath waste);

Shutdown of operations.

H-2 Implementation of Training Program

The training program described in Section H-1 will be implemented according to the following schedule:

1. Introductory Program

(a.) New employees to the job position will receive synopsis of the hazardous waste regulations and how it applies to his job, stressing the health and environmental concerns of the waste being handled.

(b.) Within six months he shall receive the complete introductory instruction.

2. The continuing training program will be performed annually.
3. The Health and Safety Meetings will be handled monthly.

All personnel working with hazardous waste will participate in the training program.

Records documenting the job title and job description for each position are maintained. A second set of records giving the work history of each employee are also maintained. The employee records describe the jobs for which the employee is qualified to perform and the training he has received. These records are maintained on-site in the personnel office of the Sodium Plant, and will be kept until closure of the facility for current employees and for three years from the date of the individual employee's termination for former employees.

MANAGEMENT POSITION DESCRIPTION

Approved by: W.D. Jensi

Date:

Description Date: 10/01/85
Reports to: MANAGER-SODIUM PRODUCTIONPrincipal Subordinates: Shop Operators (H, \$11.17),
Utility Operators, Sludge Cell Feeder

Authorized Number of Incumbents: 2-2-2 (8)

Resp. No.	Position No.
Title:	SHIFT MANAGER-SODIUM PRODUCTION
Department:	Production
Location:	Ashtabula Sodium Plant

NATURE OF ACTIVITY (Also include any unusual statements with respect to **GENERAL ACCOUNTABILITY**, **FREEDOM to ACT**, **ORGANIZATION** and **STRATEGIC PLANNING**, or exceptions to established generic descriptions.)

Supervise single turn activities of electrolytic reduction of sodium chloride into sodium metal and chlorine gas. Maintain flow of material through operation to assure the continual operation of the cell rooms, and proper operation of scrubbers and effluent control systems.

Hot, dry refined salt is received continually from the evaporator area and fed to the sodium cells. After reduction, the molten sodium is collected and transported to the filtration system, then moved to the tank car loading area, molding or storage tanks.

Facilities include: 2 cell rooms containing 100 sodium cells and 1 to 5 sludge cells, salt conveying systems, 2 container trucks, 4 sodium filters, 2 storage tank area, tank car loading area, molding area with 3 molding tables and one solid pack position, chlorine handling area that has pumping, liquification, storage and tank car loading equipment, scrubbers, effluent control systems, and burning room.

The sodium cells have a capacity of producing 50,000,000 pounds of metallic sodium and 37,500 tons of chlorine.

Must know the regulatory requirements as they relate to facility condition. He must also be knowledgeable as to the nature of the hazardous waste.

DIMENSIONS AT STANDARD VOLUME

Dollars in thousands - \$1,650

Personnel Supervised per Incumbent:

Management	0
Non-management	14

Total 14

In addition to the above, the appropriate generic description, if established, applies.

H-5

Approved by: LD PenExhibit H-2
Job Description
Rev. 8-20-86

MANAGEMENT POSITION DESCRIPTION

Date:

Description Date: 10/01/85
Reports to: PLANT MANAGERPrincipal Subordinates: Shift Manager-Sodium
Production (8)

Authorized Number of Incumbents:

Resp. No.	Position No.
Title: MANAGER-SODIUM PRODUCTION	
Department: Production	
Location: Ashtabula Sodium Plant	

NATURE OF ACTIVITY (Also include any unusual statements with respect to **GENERAL ACCOUNTABILITY, FREEDOM to ACT, ORGANIZATION** and **STRATEGIC PLANNING**, or exceptions to established generic descriptions.)

Coordinate and direct the operations of the Sodium Shop, Molding, Day Service and Shipping.

Facilities include: 100 sodium cells capable of producing 50,000,000 pounds of metallic sodium and 37,500 tons of chlorine and related systems.

Area of responsibility begins when raw rock salt is received and ends when acceptable metallic sodium and chlorine are shipped to the customer. This responsibility includes operations at the hazardous waste units -- south chute and burning room.

All maintenance involving repair and installation within the capabilities of assigned maintenance jobs is performed by the Maintenance Department.

For details, see description for Shift Manager-Sodium Production.

Must know the regulatory requirements as they relate to facility condition, operation, and inspection. He must be familiar with the day to day operation and aware of the associated hazards.

DIMENSIONS AT STANDARD VOLUME

Dollars in thousands - \$18,200

Personnel Supervised per Incumbent:

Management	8
Non-management	112

Total 120

In addition to the above, the appropriate generic description, if established, applies.

MANAGEMENT POSITION DESCRIPTION

Description Date: 10/01/85

Reports to: VICE PRESIDENT-OPERATIONS

Principal Subordinates: Manager-Salt-Chlorine Production; Manager-Sodium Production; Manager-Maintenance & Utilities

Authorized Number of Incumbents: 1

Resp. No.

Position No.

Title:

PLANT MANAGER

Department:

Operations

Location:

Ashtabula Sodium Plant

NATURE OF ACTIVITY (Also include any unusual statements with respect to **GENERAL ACCOUNTABILITY**, **FREEDOM to ACT**, **ORGANIZATION** and **STRATEGIC PLANNING**, or exceptions to established generic descriptions.)

Manage all plant production and maintenance operations in the low cost production metallic sodium, chlorine and sodium peroxide. Interpret and apply Company policies.

The principal plant facilities are: 1 cell room containing 100 sodium cells and 1 to 5 sludge cells; salt conveying systems; 2 container trucks; 4 sodium filters; 2 storage tank areas; tank car loading area; molding area with 3 molding tables and 1 solid pack position; 6 acid cooled Nash vacuum pumps; sulphuric acid and liquid chlorine scrubbing towers; 2 chlorine refrigeration systems: 1) a 125 TPD system consisting of 4 - 10 x 10 Frick compressors and 1 screw compressor, and 2) a 180 TPD packaged system consisting of 2 screw compressors; 6 - 70 ton storage tanks and a car loading station complete with an electronic scale; a tail gas recovery facility; waste tail gas neutralizer pits; lime slaking facilities; a contamination chlorine scrubbing and disposal facility; 2 - 1,500,000 gal. storage ponds for Metals Reduction Plant weak brine; 1 salt dissolver system; 5 - 90,000 gal. treatment tanks; 2 - 400,000 gal. refined brine tanks; 1 compound quintuple (5 effects) evaporator with a capacity of 480 tons of refined salt per day; 2 centrifuges; 6 refined salt storage bins each with a capacity of 125 tons; 3 dryers each with a capacity of 12 tons per hour; necessary salt conveying system to the dryers; sodium cell storage; a peroxide facility; one hazardous waste pile for cell bath waste; and one hazardous waste thermal oxidation unit for sodium and calcium wastes.

Facilities include: 100 sodium cells capable of producing 50,000,000 pounds of metallic sodium and 37,500 tons of chlorine and related systems. Sodium peroxide facilities capable of producing 6,000,000 pounds of peroxide annually.

Must be knowledgeable as to the regulations governing the Hazardous Waste Pile and the Thermal Treatment Facility.

DIMENSIONS AT STANDARD VOLUME

Dollars in thousands - \$23,000

Personnel Supervised per Incumbent:

Management	23
Non-management	296

Total 319

Approved by: H.D. FurseJob Description
Rev. 8-20-86

MANAGEMENT POSITION DESCRIPTION

Date:

Effective Date: 10/01/85
Reports to: PLANT MANAGER

Principal Subordinates:

Maintenance Engineer (1)
Shift Manager-Maintenance (6)

Authorized Number of Incumbents:

1

Resp. No.

Position No.

Title: SUPERINTENDENT-MAINTENANCE & UTILITIES

Department: Maintenance

Location: Ashtabula Sodium Plant

NATURE OF ACTIVITY (Also include any unusual statements with respect to GENERAL ACCOUNTABILITY, FREEDOM to ACT, ORGANIZATION and STRATEGIC PLANNING, or exceptions to established generic descriptions.)

Coordinate and direct the operation of the Maintenance Department in providing efficient repair, maintenance, installation, inspection, testing, and fabrication of equipment in the Sodium Plant. Also oversees mobile equipment service and general labor work.

Operating equipment maintained includes all equipment in the Sodium Plant. For more detail, refer to Management Position Description - Plant Manager.

Maintenance facilities include north and south cell maintenance areas, Electric Repair Shop, Machine Shop, Millwright Shop, Valve Repair Shop, Pipe Shop, Paint and Insulator Shop, Instrument Repair Shop.

The Maintenance Department provides 21 turn per week service and encompasses Mechanical, Electrical and Instrument Maintenance groups.

Must know the regulatory requirements as they relate to facility condition. He must also be knowledgeable as to the nature of the hazardous waste.

ESTIMATIONS AT STANDARD VOLUME

Dollars in thousands - \$4,800

Personnel Supervised per Incumbent:

Management	7
Non-management	112

Total 119

In addition to the above, the appropriate generic description, if established, applies.

JOB DESCRIPTION - RMI COMPANY

DEPARTMENT MAINTENANCE STANDARD CODE _____
VISION SERVICE DEPT. GROUP NO. 1 STANDARD TITLE _____
PLANT SODIUM PLANT TITLE MOBILE EQUIPMENT OPERATOR
DATE 1/01/84 PLANT CODE _____

PRIMARY FUNCTION

Operate all mobile equipment in the service department to move, scrape, remove or assemble various equipment or materials.

TOOLS AND EQUIPMENT

Trucks, fork trucks, tractors, payloader, and service department hand tools.

MATERIALS

Snow, dirt, stone, clay, hazardous cell bath waste and stores items.

SOURCE OF SUPERVISION

Foreman

DIRECTION EXERCISED

None

WORKING PROCEDURE

1. Operate all mobile equipment in the service department.
2. Be capable of performing all service department group No. 1 jobs, when required.
3. Operate mobile equipment by means of steering wheel, clutch, foot brake, gear shift and hydraulic levers.
4. Inspect equipment daily for defects or necessary repairs and report problems.
5. Position mobile equipment while loading and unloading or in dismantling or assembly work, as required.

In addition to knowing the regulatory requirements related to the facility condition and the hazards associated with the waste, he must also know how to operate a front end loader.

JOB DESCRIPTION - RMI COMPANY

DEPARTMENT PRODUCTION STANDARD CODE _____
(DIVISION CHLORINE PUMPING (C.P.) STANDARD TITLE _____
PLANT SODIUM PLANT TITLE ASSISTANT CHLORINE PUMPING OPERATOR
DATE 1/01/84 PLANT CODE _____

PRIMARY FUNCTION

Record readings, monitor and operate chlorine handling and related facilities.

TOOLS AND EQUIPMENT

Crescent wrenches, channel lock pliers, valve wrenches of various sizes, pipe wrenches, flashlight.

MATERIALS

Liquid and gaseous chlorine, sulfuric acid, lime, air, steam, water, 50% sodium hydroxide, 10% sodium hydroxide, refrigerant, nitrogen.

SOURCE OF SUPERVISION

Foreman

DIRECTION EXERCISED

(None

WORKING PROCEDURE

1. Monitor and operate all chlorine refrigeration equipment.
2. Monitor and operate the chlorine scrubbing facilities.
3. Monitor and operate the waste chlorine scrubbing facilities.
4. Monitor and operate the chlorine recovery facilities.
5. Hook up, unhook and weigh chlorine tank cars for loading and pressurize tanks to direct liquid chlorine to tank cars.
6. Assist in removing equipment from service and preparing equipment for maintenance work.
7. Either alone or in concert with other C.P. personnel operate pumps, fans and other miscellaneous equipment.
8. Monitor and when necessary, empty and fill or charge vessels, pits, or tanks as required.
9. Monitor and record when required, all equipment in the C.P. area not the responsibility of the C.P. operator.
10. Keep work area clean and orderly.
11. Transfer and treat waste sulfuric acid.

Must know the regulatory requirements as they relate to facility condition. He must also be knowledgeable as to the nature of the waste.

JOB DESCRIPTION - RMI COMPANY

DEPARTMENT MAINTENANCE STANDARD CODE _____
DIVISION SERVICE DEPT. GROUP NO. 1 STANDARD TITLE _____
PLANT SODIUM PLANT TITLE GENERAL LABOR
DATE 1/01/84 PLANT CODE _____

PRIMARY FUNCTION

Perform general labor work as required in the service department.

TOOLS AND EQUIPMENT

Shovel, pick, wheelbarrow, brooms, sledge, bars, etc.

MATERIALS

Scrap, dirt, lumber, sodium shop debris, including hazardous cell bath waste, cement.

SOURCE OF SUPERVISION

Foreman

DIRECTION EXERCISED

None

WORKING PROCEDURE

1. Load and unload supplies, scrap, cell bath waste, and miscellaneous materials manually.
2. Perform general clean-up work.
3. Uses pick, shovel, brooms and wheelbarrow in gathering debris, scrap, etc.
4. Shovel material into trucks, boxes or containers.
5. Perform excavation work such as digging ditches and trenches.

Must know the regulatory requirements as they relate to facility condition. He must also be knowledgeable as to the nature of the waste.

JOB DESCRIPTION - RMI COMPANY

2 IDENT PRODUCTION STANDARD CODE _____
8 VISION _____ STANDARD TITLE _____
PLANT SODIUM PLANT TITLE CELL CLEANER
DATE 1/01/84 PLANT CODE _____

PRIMARY FUNCTION

Clean first floor under cells.

TOOLS AND EQUIPMENT

Scraper, shovel, power buggy.

MATERIALS

Cell bath waste, speedy dri, sodium.

SOURCE OF SUPERVISION

Foreman

DIRECTION EXERCISED

None

WORKING PROCEDURE

1. Knock down cell bath from cells and busswork overhead.
2. Scrape and sweep floor.
3. Pick up sweepings including cell bath waste and remove with power buggy.
4. Spread speedy dri as needed.
5. Keep area clean.

In addition to knowing the regulatory requirements related to the facility condition and the hazards associated with the waste, he must also know how to operate a powered wheelbarrow

JOB DESCRIPTION - RMI COMPANY

ENT PRODUCTION STANDARD CODE _____
ISION _____ STANDARD TITLE _____
ANT SODIUM PLANT TITLE DAY SERVICE OPERATOR
ATE 1/01/84 PLANT CODE _____

PRIMARY FUNCTION

Clean sodium cell parts, copper busswork, catwalk and cell room floor.

TOOLS AND EQUIPMENT

Air guns, steam hose and lance, floor scarifying machine, hammer, wrenches, bars, fork lift truck.

MATERIALS

Cell bath, sodium, steam, air, sodium and sodium/calcium waste.

SOURCE OF SUPERVISION

Foreman

DIRECTION EXERCISED

None

WORKING PROCEDURE

1. Chip floors with air gun.
2. Operate floor scarifying machine.
3. Steam cells.
4. Knock down bath from copper busswork.
5. Burn receivers, containers and other equipment contaminated with sodium and sodium/calcium waste.
6. Wash and steam contaminated equipment.
7. Clean cell room catwalk, walls and behind cells.
8. Clean exhaust duct.
9. Clean wash tanks.
10. Clean gas lines.
11. Open up plugged cooling water coils on cells.
12. Replace water hoses as required.
13. Deliver speedy dri to shop.
14. Straighten air pipes.

must know the regulatory requirements as they relate to facility condition. He must also be knowledgeable as to the nature of the waste.

Approved by: R. J. BerandyDate: 4/18/83

MANAGEMENT POSITION DESCRIPTION

Effective Date: 3/17/83
Type to: VICE PRESIDENT-ENGINEERING

Principal Subordinates: None

Authorized Number of Incumbents: 1

Resp. No.	Position No.
Title: SUPERVISOR-ENVIRONMENTAL CONTROL	
Department: Engineering	
Location: Niles	

NATURE OF ACTIVITY (Also include any unusual statements with respect to **GENERAL ACCOUNTABILITY**, **FREEDOM to ACT**, **ORGANIZATION** and **STRATEGIC PLANNING**, or exceptions to established generic descriptions.)

Coordinate environmental affairs of the Company with the appropriate regulatory agencies, assuring that effective procedures and controls are followed by the Company for compliance with all environmental laws and regulations. Participate in all environmental matters, as deemed appropriate, to ensure compliance by the Company with environmental laws and regulations.

Recommend facility additions and improvements that are mandatory for the Company to comply with legal requirements associated with at least the following federal environmental laws and regulations as amended, and with other laws and regulations that may be promulgated in the future: A) Resource Conservation and Recovery Act (RCRA), B) Toxic Substance Control Act (TOSCA), C) Clean Water Act (CWA), D) Clean Air Act (CAA), E) Comprehensive Environmental Response, Compensation and Liability Act (Superfund), F) Safe Drinking Water Act (SDWA), G) Any other acts pertaining to the environmental protection at RMI. H) Perform duties as Training Director for hazardous waste operations at all plants.

Activities relating to environmental matters further include: A) Develop or direct development of appropriate comments and/or responses for advice to Company management on legislative and regulatory proposals relating to environmental matters; B) Negotiate as required with regulatory agencies concerning environmental matters; C) Prepare and present testimony at public hearings and legal proceedings relating to environmental matters; D) Coordinate with Operations, Engineering, Legal Dept., and environmental control agencies to anticipate problems, make cost estimates and technical recommendations to achieve practical, legal and cost effective solutions to environmental problems; E) Become involved with committees and trade associations as authorized and as necessary; F) Effectively communicate with the public and community to educate, inform and defend corporate positions on environmental matters as may be necessary and as they relate to legal, financial and technological feasibility; G) Effectively communicate to Staff and Operations management, environmental policies and direction and understanding of environmental matters as they pertain to RMI.

DIMENSIONS AT STANDARD VOLUME

Dollars in thousands - \$1,800

Personnel Supervised per Incumbent:	
Management	0
Non-management	0

Total 0

EXHIBIT H-10

Introductory Training Program

I. Hazardous Waste Management

A. State and Federal Regulations

- o Familiarity with compliance requirements, permit conditions, and classification of hazardous waste.

B. Safety Procedures for Handling Hazardous Wastes

- o Correct procedure for handling hazardous waste
- o Proper use and fit of protective clothing
 - gloves, Scott Air-Pak, eye protection, fire retardant hoods, etc.
- o Recognition of potentially hazardous situations

C. Health Effects Associated with Hazardous Chemicals

- o Familiarity with the terms toxicity, reactivity, corrosivity and ignitability
- o Description of hazardous wastes generated at RMI Sodium Plant
- o Routes of exposure, common signs and symptoms of exposure and the effects of exposure

II. Plant Operations and Maintenance

A. Proper Operating Procedures

- o Operation of the burning room (Day Service Operator)
- o Transport and handling of sodium wastes (Day Service Operator)
- o Transport and handling of cell bath waste (Service Department)
- o Waste Segregation (Day Service and Service Department)
- o Maintenance and housekeeping at the burning facility and related air quality control equipment (Day Service)
- o Maintenance and housekeeping at the Waste Pile (Service Department)

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EXHIBIT H-10 (Continued)

II. Plant Operations and Maintenance (Cont'd.)

B. Recordkeeping and Reporting

- o Maintenance of Hazardous Waste Treatment Log: Burning Room (Day Service)
- o Maintenance of Inspection Logs (Day Service & Service Dept.)
- o Maintenance of manifests and other records (Transportation Department)
- o Arrangement for shipment to disposal facility (Transportation Department)

C. Inspection and Maintenance

- o South Chute
- o Thermal Oxidation Facility
- o Safety and emergency response equipment

III. Emergency Response

A. Location, Use, and Repair of Emergency Response Equipment

- o Fire equipment
- o Personnel protection equipment
 - gloves, respirators, eye protection, coveralls, etc.
- o Clean up equipment.

B. Location and Use of Alarm and Communication Systems

- o Telephone and alarm systems
- o Procedure for notifying Emergency Director.

C. Personal Protection Procedures

- o Correct protection equipment and response required for different emergencies.

III. Emergency Response (Cont'd.)

D. Response to Spills

- o Recognition of spills
- o Mitigation procedures
- o Clean up and decontamination procedures
- o Potential for surface water contamination.

E. Response to Fire and Explosions

- o Firefighting systems and methods
- o Types of fire.

F. Evacuation Procedures

- o Signal to begin evacuation
- o Emergency assembly area location.

G. Shutdown of Operations and Power Failure Procedure

EXHIBIT H-16

Continuing Training Program

I. Hazardous Waste Management

A. State and Federal Regulations

- o Update on compliance requirements, permit conditions, and classification of hazardous waste.

B. Safety Procedures for Handling Hazardous Wastes

- o Correct procedure for handling hazardous waste
- o Proper use and fit of protective clothing
 - gloves, Scott Air-Pak, eye protection, fire retardant hoods, etc.
- o Recognition of potentially hazardous situations

C. Health Effects Associated with Hazardous Chemicals

- o Familiarity with the terms toxicity, reactivity, corrosivity and ignitability
- o Description of hazardous wastes generated at RMI Sodium Plant
- o Routes of exposure, common signs and symptoms of exposure and the effects of exposure

II. Plant Operations and Maintenance

A. Proper Operating Procedures

- o Operation of the burning room (Day Service Operator)
- o Transport and handling of sodium wastes (Day Service Operator)
- o Transport and handling of cell bath waste (Service Department)
- o Waste Segregation (Day Service and Service Department)
- o Maintenance and housekeeping at the burning facility and related air quality control equipment (Day Service)
- o Maintenance and housekeeping at the Waste Pile (Service Department)

EXHIBIT H-17 (Continued)

II. Plant Operations and Maintenance (Cont'd.)

B. Recordkeeping and Reporting

- o Maintenance of Hazardous Waste Treatment Log: Burning Room (Day Service)
- o Maintenance of Inspection Logs (Day Service & Service Dept.)
- o Maintenance of manifests and other records (Transportation Department)
- o Arrangement for shipment to disposal facility (Transportation Department)

C. Inspection and Maintenance

- o South Chute
- o Thermal Oxidation Facility

III. Crisis Management and Emergency Procedure Plans

A. Review Location and Use of:

- o Emergency response equipment
- o Alarm and communication equipment
- o Personal protection equipment

B. Emergency Response

- o Spills, fire, explosion
- o Evacuation and shutdown

HAZARDOUS WASTE MANAGEMENT PERMIT
ATTACHMENT V
CONTINGENCY PLAN

RMI COMPANY-SODIUM PLANT
U.S. EPA FACILITY I.D. #OHD 000810242

G CONTINGENCY PLAN

G-1 General Description

RMI Company - Sodium Plant
P.O. Box 550
State Road and East 6th Street
Ashtabula, Ohio 44004
OHD000810242

SIC Codes: 2812 (Manufacture of Chlorine)
2819 (Manufacture of Sodium)

Owned and Operated by:

RMI Company
1000 Warren Avenue
Niles, Ohio 44446

RMI Company, Sodium Plant (RMISP) is located in Ashtabula County, Ohio and owned by RMI Company in Niles, Ohio.

RMISP manufactures sodium and chlorine by the Downs Electrolytic process. Saturated brine from an on-site salt mining well is treated and the water removed by evaporation. The resulting dry purified salt, calcium chloride, and barium chloride is fed to downs electrolytic cells (100 cells at capacity). The salt mixture (bath) is maintained in a molten state. Metallic sodium and gaseous chlorine is generated by electrolysis. The chlorine is purified, liquefied and stored on site. The sodium is maintained in liquid form and filtered (to remove calcium) prior to storage and solidification. (See the Process Diagram in Figure B-1.)

RMISP generates three hazardous wastes: (1.) sulfuric acid (corrosive), (2.) cell bath (containing barium, cadmium, and lead), (3.) and sodium/calcium sludge (reactive).

The cell bath waste is temporarily stored on-site in a waste pile prior to shipment off-site for disposal. The waste acid is neutralized on-site with lime. The sodium and sodium/calcium sludge is treated on-site by thermal oxidation. (Quantities generated are given in Table B-1.)

The areas where each waste is generated, stored and treated is shown in Figure G-3. Further delineation of the locations of the burning room, south chute (waste pile), and Acid Neutralization Facility are shown in the topographical map, Figure B-2. Locations of emergency equipment are given in Figure G-1.

The RMISP Hazardous Waste Contingency Plan is actually an integral part of three plans: (1.) Crisis Management Plan, (2.) Spill Prevention Control and Countermeasure Plan, and (3.) Emergency Procedures Plan. These plans are designed to minimize hazards to human health and the environment from fires, explosions, or any unplanned sudden or non-sudden release of chemicals (including hazardous wastes) to air, soil, or water resources. The procedures specified herein will be implemented immediately whenever an emergency or crisis, or potential emergency or potential crisis occurs at RMISP.

The plans will be reviewed and amended, if necessary, whenever:

- (1.) The facility permit is revised;
- (2.) The plan is inadequate in an emergency;
- (3.) The facility design, construction, operation, maintenance, or other circumstances change to increase the potential for fires, explosions, or release of hazardous chemicals in an emergency.
- (4.) The list of Crisis Coordinators changes; or
- (5.) The list of emergency equipment changes.

G-2 Emergency Coordinators

The Emergency Coordinator and his alternates are designated Crisis Coordinators and will henceforth be called Crisis Coordinators in this document. The RMISP makes the following arbitrary distinction between a crisis and an emergency:

- (a.) "A crisis situation is one which is beyond the control of the plant employees on duty at the time the crisis is first determined to exist. It may require notification of and assistance from external sources."

- (b.) "An emergency situation is one which is not beyond control of plant employees, but requires the awareness of management personnel."

Whenever a crisis or emergency situation occurs at the facility, the discoverer will notify the Shift Manager on duty. The Shift Manager will quickly make an appraisal of the nature and severity of the situation. He will then make the following contacts:

- (a.) Emergency:
 - 1. Notify guard
 - 2. Guard notifies other supervisors (in-house)
- (b.) Crisis
 - 1. Notify guard
 - 2. Implement Crisis Management Plan

The chain of command shown in Table G-1 will be used during crisis conditions. The highest ranking person on the list to arrive at the scene of the crisis will take charge of response activities and will conduct operations until relieved by someone higher on the list. If a Crisis Coordinator must be summoned from off-site, each person on the list given in Table G-2 will be called, starting at the top, until an available Coordinator is located.

The Acting Crisis Coordinator has complete authority to commit company resources necessary to implement the Plan in the case of a crisis.

The Crisis Coordinator and Alternate Coordinators are responsible for coordinating all crisis response measures, and each is thoroughly familiar with:

- o The RMISP Crisis Management, Emergency Procedures, and Spill Prevention Control and Countermeasure Plans;
- o All operations and activities at RMISP;
- o The locations and characteristics of the major chemicals and all hazardous wastes on-site;
- o The location of all records at the facility; and
- o The physical layout of the facility.

G-3 Implementation

The Crisis Management Plan will be implemented in the following situations:

1. Fire and/or Explosion

- a. A fire causes the release of toxic fumes.
- b. The fire spreads and could possibly ignite materials at other locations on-site or could cause heat-induced explosions.
- c. The fire could possibly spread to off-site areas.
- d. Use of water or water and chemical fire suppressant could result in contaminated runoff.
- e. An imminent danger exists that an explosion could occur, causing a safety hazard because of flying fragments or shock waves.
- f. An imminent danger exists that an explosion could ignite hazardous substances or wastes.
- g. An imminent danger exists that an explosion could result in release of toxic material.
- h. An explosion has occurred.

2. Spill or Material Release

- a. The spill could result in release of flammable liquids or vapors in sufficient quantity to pose a fire or gas explosion hazard.
- b. The spill could cause the release of toxic liquids or fumes in excess of the amounts listed as reportable quantities in 40 CFR § 302.4.
- c. The spill can be contained on-site, but the potential exists for groundwater contamination in excess of the quantities listed in 40 CFR § 302.4.

- d. The spill involving a hazardous, toxic, or organic substance cannot be contained on-site, resulting in off-site soil contamination and or water pollution.

3. Flood

- a. The potential exists for fire or explosion due to contact with water, or potential for surface water contamination.

G-4 Emergency Response Procedures

G-4a Notification

Notification protocol will be conducted in accordance with Section II (Crisis Operational Plan) of the Crisis Management Plan. This protocol is given below:

- 1. The Shift Manager on duty will quickly make an appraisal of the crisis or emergency situation. He will then make the following contacts:
 - A. Emergency:
 - 1. Notify guard
 - 2. Guard notifies other supervisors (in house).
 - B. Crisis:
 - 1. Sound evacuation alarm, if applicable.
 - 2. Notify guard if an emergency service such as the fire department is needed immediately, instruct guard to call for services prior to implementing published plan.
 - 3. Implement Crisis Management Plan

2. Those persons contacted first shall immediately report to the plant or to the alternate meeting place as designated.
3. The guard on duty will continue calling the Crisis Management Team members according to the Emergency and Crisis Call List (see Table G-2).
4. Other personnel and emergency services will be called according to the Emergency Call List as required. (See Table G-3.)
5. The Communications Officer, or if he is unavailable, the Assistant Communications Officer, will handle the contacts with the press after consultation with the Crisis Coordinator. It is necessary that proper and correct information be given to the press, not rumors or information obtained by casual contacts with employees who may or may not have accurate information about the situation.
6. The Communications Officer or his designee will also notify families of affected employees.
7. All members of the Crisis Management Team, if called to the plant, must report to the Guard House or the alternate meeting place, as designated, so that all members can be accounted for and to receive instructions.
8. Whether during weekdays or weekends, all calls must be made according to procedure in order to preserve order.

The source, amount and aerial extent of the released materials should be determinable by visual observation. Since the type and quantity of each toxic chemical and hazardous waste are known for each area of the plant, the maximum quantity involved, if not the actual amount, can be readily ascertained.

G-4c Assessment

Possible hazards to the environment and public health will be assessed immediately by the Shift Manager and subsequently by the Crisis Coordinator. The Shift Manager also assesses the need for evacuation and notification of local authorities until the Crisis Coordinator or alternate arrives on the scene. In assessing the situation, the Crisis Coordinator will consult with other members of the response team to determine both direct and indirect effects of the release, fire, or explosion. Typical considerations

would be the effect of any gases that might be generated; the effect of runoff of water or chemical agents used to control fire, potential for heat induced explosions, and hazards due to structural damage.

Emergencies at the plant could involve the following toxic materials/wastes:

- (1.) Sulfuric Acid
- (2.) Hydrochloric Acid
- (3.) Sodium Hydroxide
- (4.) Chlorine
- (5.) Barium Chloride
- (6.) Sodium
- (7.) Sodium/Calcium Sludge
- (8.) Cell Bath Waste

Action is taken to avoid or minimize the release or potential release of toxic effluents (liquid or vapor) during an emergency/crisis.

Should conditions arise making it necessary to evacuate working areas, employees will be given instructions by the supervisor to leave their work area by the nearest exit door and proceed to a designed refuge area.

If the crisis situation requires personnel evacuation of the entire plant, the Shift Manager will be called at Extension 223 and informed to sound the evacuation signal on the fire alarm. The signal will be a 30 second blast followed by one, two, or three short - one second - blasts. The short blasts will designate the specific refuge area. The alarm will be actuated repeatedly.

If the emergency involves the release or imminent release of copious amounts of toxic fumes or material off-site, and there is a danger to the public, then Disaster Services, the Ashtabula County Sheriff's Department, and the National Response Center will be contacted in the order given. The Disaster Service Coordinator or first emergency service reached will be apprised of any members of the public known to be in imminent danger.

G-4d Control Procedures

G-4d(1) Fire or Explosion

As described in Section G-4a, plant employees and the Crisis Coordinator will be alerted of the emergency/crisis situation. The on-site refuge areas used for evacuation purposes are shown in Figure G-4.

The Shift Manager or subsequently the Crisis Coordinator will initiate notification of local authorities and response teams, Ohio EPA, and the National Response Center as necessary.

The following guide or checklist is used in responding to an emergency or crisis, including those involving fires or explosions:

I. EMERGENCY SITUATION

1. Assemble and instruct personnel.
2. Provide necessary protective equipment.
3. Isolate and contain the problem area.
4. Affect equipment shutdown (if necessary).
5. Resolve emergency.
6. Clean up.
7. Initiate repairs.
8. Review and investigate.

II. CRISIS SITUATION

1. Assemble and instruct personnel.
2. Provide necessary protective equipment.
3. Isolate and contain the problem area.
4. Plant shutdown (if and where necessary).
5. Evacuate and account for personnel (if and where necessary).
6. Resolve crisis.
7. Clean up.
8. Initiate repairs.
9. Review and investigate.

In case of fire, the Shift Manager determines initially if the incident can be handled by RMI personnel. If it can be handled internally, the area Foreman or Shift Manager will direct the efforts of employees in the area and those accepted as volunteers from other work areas. Sufficient personnel will be appointed as crowd control officers to ensure that on-lookers do not interfere with the activities of the firefighting team or place themselves in danger. Whenever possible, the fire will be approached from an upwind direction.

After identifying character, source, amount, or extent of any released material, or the size and nature of the fire, a determination will be made as to the need for outside assistance. If such is the case, the Crisis Management Plan will be activated.

When toxic fumes are suspected, the area should not be approached until proper respiratory protection is available. Toxic fumes are to be suspected when any of the following conditions exist:

- o The odor of chlorine gas or potential of chlorine release due to the fire.
- o Thick white fumes are observed, indicating the release of sodium oxide.
- o Hydrochloric or sulfuric acid is involved in the fire.
- o Thick accumulation of smoke or fumes is present.

The first order of priority is to rescue any people affected by the emergency/crisis. If necessary, assistance from the Ashtabula Township Fire Department or other emergency service will be called upon.

The second order of priority is to extinguish any fires, secure any ruptured vessels, lines, or containers, and to initiate any other control measures necessary to ensure that no further damage to the public health, the environmental, or property, will be incurred.

The following is a list of materials that are in use at the Sodium Plant and must be of concern in case of an emergency or crisis: The RMISP Emergency Procedures Plan defines these materials, indicates what protective equipment is necessary for each, and describes the symptoms of exposure and remedial action necessary for each of the chemicals.

I. Items of Major Concern

1. Chlorine
2. Sodium and Sodium Wastes
3. Hydrochloric Acid
4. Sodium Hydroxide
5. Nitrogen
6. Natural Gas
7. Sulphuric Acid and Sulfuric Acid Waste

II. Items of Lesser Concern

1. Gasoline
2. Diesel Fuel
3. Kerosene
4. Grease and Oil
5. Propane
6. Oxygen
7. Acetylene
8. Transformer Oil Containing PCB's
9. Solvents
10. Other
 - a. Asbestos
 - b. Mercury
 - c. Barium Chloride
 - d. Cell Bath Waste

Since the "south chute" and its contents are not combustible, release of the material due to fire is highly unlikely and is not addressed here. If an explosion with sufficient force to release the cell bath waste to the atmosphere does occur, the release or potential release of more toxic substances would receive the full attention of the emergency team. According to such a scenario the cell bath waste released would be addressed after the emergency had passed.

If an explosion or uncontrolled fire involving sodium waste occurs at the burning room, the procedure for handling sodium fires will be implemented. Namely, smothering the fire with salt or soda ash. If the burning sodium/calcium is on the walls outside the burning enclosure, dry type extinguishers for metal fires (Met-L-X (R)) will be used.

Sodium/calcium wastes are not stored at the burning facility. Therefore, waste subject to fires or explosion at the burning room will be in the burning cubical when the incident occurs; thus minimizing adverse consequences of the mishap.

Descriptions of the mechanism for implementing the Crisis Plan, list of available emergency services, and hazard assessment protocol are given in Sections G-4a, b, and c above.

G-4d(2) Spill or Release

As described earlier, the Shift Manager determines if the nonroutine occurrence is an emergency or crisis, and implements appropriate plans based on the decision. Plant employees and the Crisis Coordinator will be notified as applicable.

All nonroutine occurrences which result in a release or imminent release of a reportable quantity of any chemical given in 40 CFR§ 302.4 will be considered a crisis. Thus as a minimum, the Crisis Coordinator and the Ohio EPA Response Center will be notified.

The Shift Manager and subsequently the Crisis Coordinator will notify the various emergency services as necessary. The Crisis Coordinator will identify the character, source, amount, and extent of the released material(s) as described G4-b above.

As described in Section G-4c, the Crisis Coordinator will assess possible direct and indirect hazards to human health or the environment.

The first order of priority is to rescue any people affected by the emergency/crisis. Assistance in rescue operations can be readily obtained from the Ashtabula Township Fire Department and other local emergency services.

The second order of priority is to secure any ruptured containers or initiate any other control measures necessary to ensure that further damage to property and/or the environment will be minimized. If a release has been made to the waterways, the methods to mitigate the waterborne pollutant's effect will be implemented concurrent with the above.

Each employee and visitor in the plant is supplied with goggles and a pocket respirator for emergency use. When toxic fumes are suspected, the emergency escape equipment is utilized. However, in an emergency willful entry into a contaminated area will be limited to those appropriately equipped for the circumstance. Circumstances consistent with existence of toxic fumes is given in G-4d(1) above.

G-4e Prevention of Recurrence or Spread of Fires, Explosions, for Releases

The basic protocol used by the Sodium Plant to minimize the potential for recurrence or spread of a fire, explosion, or released is outlined below:

1. Pre-Crisis Planning - preparation in advance of event (See Exhibit G-1).
2. If necessary, stopping operations in the area.
3. Containment of released materials.
4. Isolate and, if possible, plug leaking or ruptured piping, equipment, or vessels.
5. If sodium is involved, avoid contact of material with water.
6. Monitor valves, pipes, and other equipment in the area for signs of overheating, leaking, or other types of deterioration resulting from the incident.

G-4f Storage and Treatment of Released Material

The nature of the waste streams and the circumstances in which residue would remain limit the required responses.

(1.) If sodium or sodium/calcium sludge were released and did not ignite, the dry material would be scooped, shoveled, or otherwise picked up; placed into drums; and covered with salt or soda ash. If the material was burning, it would be smothered with salt or soda ash and placed into drums. There will be no need to analyze the waste prior to storage or treatment. In all cases treatment will be by thermal oxidation followed by steaming in a manner identical to normal operations.

The material will be temporarily stored in the non-operational #2 Cell Room (see Figure B-2A).

(2.) If the "south chute" was totally destroyed, the released material would be shoveled and/or scooped up and placed into roll off container for immediate disposal. If the "south chute" was structurally sound, the released material would be scooped or shoveled up and placed onto the waste pile. If the released material was contaminated with water and was such a volume as to constitute a leachate problem, the material would be placed into a roll-off container. A "paint filter test" would be performed on the waste to establish the presence of free liquid. Request would be made to the Ohio EPA for permission to add an absorbent to material containing free liquid prior to shipment off site.

G-4g Incompatible Waste

Sodium and sodium/calcium sludge reacts violently with water and various organics. All workers at the plant are acutely aware of this incompatibility. Any sodium or sodium/calcium waste that has been released and subsequently recovered will either be burned immediately or temporarily stored in drums in the #2 Cell Room. The drums will carry a sodium label and a label stating "Hazardous Waste". The sodium label notes the basic hazards of the material.

G-12a

G-4h Post-Emergency Equipment Maintenance

Unless permanent shut down of the plant is mandated by the circumstance, certain operations cannot be suspended. Therefore the following operations will continue: maintain power to cells, handling of chlorine (chlorine pumping or chlorine burning), sodium filtration, and addition of salt to cells. However, after a crisis, the following items will be addressed under the guidance of the Crisis Coordinator before normal operation resumes:

1. All utilities such as electrical, natural gas, ASHCO water, and city water will be restored to the site.
2. Building structures and walls will be examined for structural soundness and all structural hazards identified and remedied.

3. Equipment will be operating properly, repaired, or taken out of service.
4. All emergency equipment and materials (see Exhibit G-2) must be restocked, recharged, or repaired as necessary.

Status reports will be given to the Ohio EPA concerning damage to the waste pile or thermal oxidation unit. The Crisis Coordinator or Corporate Environmental Control will also notify the OEPA when the hazardous waste management facilities have been restored to preemergency conditions and meet all RCRA Permit conditions.

G-4i Container Spills or Leakage - Not Applicable

G-4j Tank Spills and Leakage - Not Applicable

G-4k Waste Pile Spills and Leakage

Due to the nature of the operation and size of waste pile, the maximum quantity of cell bath waste that can be spilled is one ton (approximately 1 cubic yard). Furthermore, any incident resulting from spilling of waste from the pile will occur in close proximity of the pile. As noted earlier, the waste does not contain free liquids, nor flows, and is not subject to wind dispersal. Therefore any spilled waste is simply shoveled and/or swept into the waste pile. If the spill is more than a couple of feet from the pile, the residue can be placed in the bucket of a front end loader or wheelbarrow. Shovels and brooms are located in the Day Service Area for clean-up purposes. The Manager of Sodium Production or his designee is responsible for spill clean-up at the "south chute."

G-5 Emergency Equipment

Emergency equipment and materials for the entire Sodium Plant is given in Exhibit G-2. Much of the plant's equipment such as fork lifts, front end loaders, and various tools are available for immediate service during a crisis/emergency. However the emergency equipment designated as emergency equipment for the hazardous waste management facilities are:

A. Burning Room

- a. Shovels (two)
- b. Broom (one)
- c. 250 lb. (5 x 50 lb. bags) of salt or soda ash
- d. Met-L-X Fire Extinguisher (dry type)
- e. Pocket respirator and goggles (each employee)
- f. Scott Air-Pak (Respirator)
 - 1. Chlorine Production (three) located approximately 250 ft. from burning room.
 - 2. Evaporator Area (one) located approximately 100 ft. from burning room.

B. South Chute

- a. Shovels (two) located in Day Service Area
- b. Broom (one) located in Day Service Area

Figure G-1 shows location of emergency equipment.

The RMISP maintains a Dispensary on-site. The Dispensary is manned 24-hours a day by a registered nurse and a doctor is on-call. Protective clothing and communication equipment have been discussed earlier.

G-6 Coordination Agreements

RMI Company has sent letters requesting coordination agreements to six emergency assistance groups in the Ashtabula area. The letters request the various organizations to acknowledge availability of service, at which time a copy of the plant's Crisis Management Plan will be provided to the assistance group. The request for agreements were sent to:

- City of Ashtabula Fire Department
- Ashtabula Township Fire Department
- State Highway Patrol - Ashtabula Post
- Sheriff's Department - Jefferson
- Ashtabula County Medical Center
- Emergency Management Agency - Jefferson

Copies of the letters are found in Exhibit G-3 through G-8.

G-14a

The City of Ashtabula Fire Department, Ashtabula Township Fire Department, and Emergency Management Agency have sent representatives to the site and are in receipt of the Emergency Procedures and Crisis Management Plan. They are prepared to respond in an emergency.

The State Highway Patrol has confirmed in writing its availability to respond in an emergency at the RMI Sodium Plant (see Exhibit G-5A).

The Ashtabula County Medical Center is participating in the Hazardous Material Advisory Council (an industry group in which the RMI Sodium Plant is a member). The medical center will be receiving a Material Safety Data Sheet for every chemical maintained at the plant. It is therefore prepared to treat on an emergency basis those individuals exposed to chemicals, including the wastes, that are at the site.

The Ashtabula Township Fire Department will be the first responder to a fire or hazardous chemical incident. The on-scene incident commander working with plant personnel will evaluate the situation in order to:

- a. Ensure that all necessary safety precautions are taken to protect response and plant personnel and the population in the immediate area.
- b. Determine the need for evacuation and establish boundaries for such.
- c. Determine the need for assistance from outside agencies and request such assistance as deemed necessary.
- d. Take proper steps to contain and control the situation.

The Ashtabula City Fire Department will assist the Township Fire Department as needed.

The State Highway Patrol and County Sheriff's Department when called will assist in crowd and traffic control, and evacuation notification as directed.

The Emergency Management Agency located in Jefferson will coordinate with the incident commander in establishing and implementing the evacuation plan including communication, transportation, routes, centers, etc.

G-7 Evacuation Plan

PURPOSE: Plan for Safe Evacuation in the Event of an Emergency/Crisis.

RESPONSIBILITIES: The Shift Manager or Crisis Coordinator is responsible for initiating plant wide evacuation. Evacuation of a work area during an emergency is the responsibility of the area's supervisor. Since all visitors on-site are accompanied by an employee, the escort has the responsibility to assure the visitor's safe evacuation. Employees are responsible for shutting down relevant operations and proceeding to the designed refuge area.

CRITERIA: No incident at the waste pile itself could cause an evacuation. An explosion and fire at the burning room could, under certain circumstances, require evacuation of the work area. However, the basis for evacuation of the Sodium Plant is the same regardless of the location of the incident - "If in the judgment of the Supervisor, Shift Manager, or Crisis Coordinator, the health, safety, and welfare of those present are in jeopardy, the individuals must be evacuated. This decision will include such variables as the nature of the incident, training of the individuals and safety equipment present."

PROCEDURES: Should conditions arise making it necessary to evacuate working areas, employees will be given instructions by the supervisor, and are to leave their work area by the nearest exit door and proceed to the designated refuge area.

The operators in each work area are responsible for the orderly shut down of equipment in their area before proceeding to a refuge area. Certain pieces of equipment will remain in operation unless total evacuation is absolutely necessary or an individual piece of equipment is directly affected by fire or other circumstance, requiring its shut down.

The need to evacuate personnel from a specific area or the entire Plant will probably be the result of a major fire or chlorine release. The alarm for total evacuation will be a 30 second blast followed by one, two, or three short - one second - blasts. The short blasts will designate the specific refuge area. The alarm is located in the Sodium Shop Foreman's Office and will be actuated repeatedly until evacuation is complete.

Fire Emergency

Areas where the potential for a major fire exists are as follows:

1. Cell Room. The fire would result from a sodium spill and will probably involve both the first and second floors.
2. Filter Area - first and second floors.
3. "Container Hospital" Area.
4. Sodium Molding Room.
5. Tank Car Building.

In the event of a fire in any of the above areas, it is unlikely that a general evacuation of the entire plant would be necessary. If necessary, employees will be so instructed by their supervisor to proceed to a designated refuge area. A fire isolated in one of the above areas will be handled by the responsible supervisor in accordance with procedures outlined in Section III of the Emergency Procedures Plan.

General Office Building

The office building is equipped with a fire alarm system which when activated, gives off a bell sound. Upon hearing this alarm, all personnel in the office will proceed to the first floor entry area where the department heads will account for their personnel. If necessary, further instructions will be given at that point.

During testing, notification will be given to all areas prior to starting the test.

Chlorine Emergency

Chlorine emergencies requiring evacuation of an area or the entire Plant would most likely occur as follows:

1. Loss of pull in the Sodium Shop will be accompanied by the continuous sound of the gas horn. When this occurs, all personnel working on either the first or second floor of the Sodium Shop will leave by the nearest exit and proceed to the area south of the Chemical Lab or to the courtyard north of the laundry, and remain there until the horn is turned off. This emergency could develop into a crisis.

2. Chlorine releases caused by operating problems in the Chlorine Production Area could result in the need for people in the affected area to go to the designated refuge area upwind of the problem.
3. A crisis caused by a ruptured pipe, valve, storage tank, etc., could result in an evacuation of the entire Plant and possibly the adjacent community. Should this occur, personnel will proceed upwind in an orderly fashion and remain at the designated refuge site.

The three on-site refuge areas are shown in Figure G-4 and listed below:

Salary and Hourly Parking Lots
Millwright - Machinist Building
Pilot Plant

When an evacuation is announced, normal operations cease. Employees, other than Emergency Response Team, must leave the facility and report to the designated assembly (refuge) area. They have been instructed to walk, not run, not to linger in entranceways or driveways, and to stay together in the assigned refuge area. Each employee must report to the manager of his department or department manager's designee upon arrival at the Assembly Area.

Upon announcement of the evacuation, the Production Officer will dispatch an individual to the RMI Metals Reduction Plant Guard House (less than one mile away) to pick up two Scott Air-Paks which are permanently stored at that location for the purpose. These full face respirators will be used for re-entry purposes. Also stored at the Guard House and retrieved at the same time are the following:

- (1.) Keys to all perimeter gates at the Sodium Plant
- (2.) Copies of the RMI Sodium Plant Crisis Management Plan and Emergency Procedures Plan
- (3.) Blank Personnel Statement Forms
- (4.) Citizens Band Communications Equipment (1 - Fixed Station Transceiver and 1 - Portable Transceiver)

At the Emergency Assembly Area, the Fire, Safety and Health Officers will initiate an immediate head count of all personnel in the plant at the time of the emergency. If there are missing persons, a check will be made with the guard on duty to see if these people are off-site. The Crisis Coordinator will be advised of unaccounted-for people, and he will initiate search and rescue operations.

The employees will be instructed to stay outside the facility until notified to re-enter.

The Crisis Coordinator will determine when all Emergency Control Procedures are completed and will then initiate the following actions:

- a. Report the situation to the Plant Manager if he has not been acting as the Crisis Coordinator. Except for amelioration of the accident conditions, the scene of the accident should not be disturbed until it is released by the Plant Manager or his designee.
- b. Positions should be recorded of victims and/or items which must be moved during amelioration.
- c. Photos should be taken to record pertinent features of the accident scene.
- d. Personnel involved in the crisis; or whom may have been witness to the incident will be interrogated by the Health-Safety Officer and/or the Production Officer to gather pertinent data on the incident. The Personnel Statement Form may be used to conduct interrogation. A supply of these forms are maintained with the Air-Paks at the Metals Reduction Plant.
- e. Any other appropriate actions should be taken to preserve transient service.
- f. The Engineering Officer and the Maintenance Officer will make a complete survey of the emergency area to determine what damage has been done to the plant and/or its equipment. They should make suggestions to the Plant Manager as to what should be done physically to place the emergency area and the rest of the facility in the safest possible conditions until accident investigations are complete. Before re-entry for resumption of normal operations after an evacuation, the Health-Safety Officer and the Crisis Coordinator will determine whether the plant has been restored to a level which will ensure uneventful operations. If a hazardous management facility was involved in/or impacted by the incident, permit compliance will be assured prior to resumption of waste management activities.

EMERGENCY PRECAUTIONS FOR EMPLOYEES

1. Keep calm, think, avoid panic and confusion.
2. Know all exit locations: Be sure you know the safest and quickest way out of all buildings.
3. Do not lock office doors when vacating the facility. The Crisis Coordinator and emergency support personnel must have visual access to all areas to ensure that the facility is clear of personnel.
4. Do not delay evacuation of the facility for any reason.
5. Do not assist in fire control unless properly trained and qualified.
6. Do not use the telephone. This communication system must be reserved for the Emergency Response Team.
7. When evacuating the facility WALK to the nearest safe exit. Report to your department manager or his designee at the assembly area.
8. Keep out of the way, stay clear of the emergency and DO NOT interfere with the emergency operations.
9. DO NOT re-enter the facility until instructed to do so.

G-8

Required Reports

The Plant Manager will note in the operating record and in an internal letter to Environmental Control the time, date, and details of any incident that requires implementing the Crisis Plan. Within 15 days after the incident, Corporate Environmental Control will submit a written report on the incident to the Ohio EPA. The report will include:

1. Name, address, and telephone number of the owner or operator;
2. Name, address, and telephone number of the facility;
3. Date, time and type of incident (e.g., fire, explosion);
4. Name and quantity of material(s) involved;
5. The extent of injuries, if any;
6. An assessment of actual or potential hazards to human health or the environment, where applicable; and
7. Estimated quantity and disposition of recovered material that resulted from the incident.

III. CRISIS MANAGEMENT TEAM

CRISIS CO-ORDINATOR
PLANT MANAGER
SODIUM PLANT

ALTERNATE OFFICER
MANAGER-SODIUM PRODUCTION

SECOND ALTERNATE OFFICER
MANAGER-MAINTENANCE

PRODUCTION OFFICER
MANAGER-SODIUM PRODUCTION

COMMUNICATIONS, FIRE, SAFETY AND HEALTH OFFICER
MANAGER - EMPLOYEE RELATIONS

MAINTENANCE OFFICER
MANAGER-MAINTENANCE

MANAGER-SALT, CHLORINE, CELL CONSTRUCTION

AREA MANAGER-CHLORINE

AREA MANAGER-BRINE & EVAPS

SHIFT MANAGER-SODIUM PRODUCTION (9)

ASSISTANT COMMUNICATIONS OFFICER
SUPERVISOR - EMPLOYEE RELATIONS

SECURITY PERSONNEL

NURSE

MAINT. ENG.

ENG. OFFCR.
PLANT ENG.

STORES
STOREKEEPER

ELECT. ENG.

SHIFT MANAGER-BOILERHOUSE

SHIFT MANAGER-ELECTRICAL

SHIFT MANAGER-MAINTENANCE (6)

EMERGENCY AND CRISIS CALL LIST

- | | |
|---|--|
| 1. Crisis Coordinator - Plant Manager
Ben DiRienzo | 3917 Edgewater Drive
Ashtabula, Ohio 44004
Office.....261
Residence.. 964-6644 |
| 2. Alternate Officer - Manager Sodium Production
Brian Wright | 376 Roosevelt Drive
Geneva, Ohio 44041
Office.....358-354
Residence.. 466-1560 |
| Doug Korb | 2008 East 44th Street
Ashtabula, Ohio 44004
Office.....254
Residence.. 998-2715 |
| 3. Second Alternate Officer -
Manager-Maintenance & Utilities
Richard Dean | 1651 West 5th Street
Ashtabula, Ohio 44004
Office.....237
Residence.. 964-6429 |
| 4. Production Officer -
Manager-Sodium Production
Brian Wright
Doug Korb | Office.....358-354
Residence.. 466-1560

Office.....254
Residence.. 998-2715 |
| 5. Communications, Fire, Safety, Health Officer -
Manager-Employee Relations
Doug Herl
Jerry Bennett | Office.....278
Residence.. 993-0837
Office.....323
Residence.. 964-6567 |
| 6. Maintenance Officer -
Manager-Maintenance & Utilities
Dick Dean
Tom Puffer | Office.....237
Residence.. 964-6429
Office.....284
Residence.. 593-6501 |
| 7. Manager-Salt, Chlorine & Cell Construction
Doug Korb | Office.....254
Residence.. 998-2715 |
| 8. Chlorine Production
Gerry Runyan | Office.....293
Residence.. 998-6435 |
| 9. Brine, Evaporator
Bob Howe | Office.....239
Residence.. 224-1514 |
| 10. Supervisor - Employee Relations (Metals Plant)
Jerry Bennett | Office.....323
Residence.. 964-6567 |

11. Eng. Officer - Plant Engineer Bernie Baughman	Office.....315 Residence.. 922-5702
12. Stores - Storekeeper Chuck McMunn	Office.....251 Residence.. 593-3314
13. Security Personnel	Office.....219
14. Nurse	Office.....215
15. Elect. Engineer Mike Thomas	Office.....235 Residence.. 224-0537
16. Boilerhouse - Shift Manager Fred Myers	Office.....230 Residence.. 576-3199
17. Electrical-Shift Manager Gary Stevens	Office.....222 Residence.. 224-1912
18. Sodium Production-Shift Managers Lary Hovis Chuck Leonard Dick McBride Jack Barker Carl Udell Jeff Clements Bob Aiken Rich Kermetz Jack Allman	Office.....258-259 Residence.. (814) 765-5157 Residence.. 998-3800 Residence.. 599-8349 Residence.. 275-3721 Residence.. Residence.. 964-3356 Residence.. 593-1922 Residence.. Residence.. 466-5976
19. Maintenance-Shift Managers Gordon Park Roland Addair Bill Robinson Jim Atzemis Jack Specht Jerry Bacon	Office.....240 Residence.. 964-3776 Residence.. 224-1324 Residence.. 293-6255 Residence.. 998-4586 Residence.. 599-7490 Residence.. 224-0108

**TELEPHONE NUMBERS FOR EMERGENCY PERSONNEL
AND SERVICES**

1. Dr. Edward Carrillo	Office....969-1151 Residence.964-2985 Hospital..998-3111
2. Dr. Orlando D'Silva	Office....964-7121 Residence.964-2213 Hospital..998-3111
3. Ashtabula County Medical Center	998-3111
4. Brown Memorial Hospital	1-593-1131
5. Geneva Memorial Hospital	466-1141
6. Fire & Ambulance - Ashtabula Township	997-5275
7. Ashtabula City Police Department	998-2221
8. Ashtabula County Sheriff's Office	997-5585
9. Ohio State Highway Patrol	969-1155
10. U. S. Coast Guard - Ashtabula - Cleveland	964-9417 1-522-4405
11. Ohio National Guard (Ashtabula)	State Road 992-6130
Adjutant General - Disaster Services Agency	1-614-889-7150
12. OSHA - Cleveland Office	1-522-3818
13. NIOSH - Cincinnati Office	1-513-684-8235
14. National Welders Supply	964-7072
15. Weld-Cut, Inc.	997-5931
16. EPA - OHIO (Twinsburg)	1-425-9171
17. Disaster Services - Working Days and/or Hours After Hours (Sheriff's Dept.)	675-9148 576-0055
18. Union Carbide Linde Air Division	997-5126
19. C.E.I.	998-3131
20. Life Flight	1-800-233-5433

EXHIBIT G-1

PRE-CRISIS PLANNING

1. Crisis procedures must be discussed with local disaster, police, fire, hospital and utility personnel. These agencies will be contacted during a crisis as required by the communications officer.
2. Supervisors and many hourly employees have been instructed in the use of the Scott Air Pack and respirator. Re-training in the use of this equipment is a continuing program.
3. Key people have been trained in the use of the Chlorine Institute Emergency Kit for the handling of chlorine leaks.
4. Wind direction and velocity is monitored continuously within the Plant to assist in determining the affected area in the event of a major chlorine release.
5. An on-site Dispensary staffed by registered nurses with a doctor on call is manned 24 hours a day.
6. A continuous training program is in progress on the operation of the various types of fire extinguishers and their proper use. A regular program of inspection of fire extinguishers is in operation so that they will always be ready for immediate use.
7. An emergency telephone list has been published and given to key personnel. The list contains telephone numbers of doctors, hospitals, ambulance services, police, fire departments, etc.
8. Regular safety and housekeeping inspections are made of the entire plant and property in order to maintain the premises in a safe condition.
9. Two alternate meeting places for plant personnel have been established in the event of a major crisis and the Sodium Plant is inaccessible. They are:
 - A. Metals Plant - Personnel Office
 - B. Township Fire Department - Route 20
10. The Ashtabula County Emergency Operation Center is located in Jefferson at the Justice Center.

EXHIBIT G-2

EMERGENCY EQUIPMENT AND MATERIALS

SCBA Units

Scott Air-Pak

- (3) Chlorine Production
- (1) Evaporators
- (1) Sodium Shift Foreman's Office
- (1) Substation

Scott Ska-Pak

- (4) Chlorine Production

Bottled Air

- 1 Bottle - Substation #1
- 4 Stations - Chlorine Production
- 1 Portable - Sodium Shop

Pocket Type Respirators

Each employee is issued a pocket-type chlorine respirator. Extra cartridges or respirators are located in the storeroom or Safety Supervisor's Office.

Chlorine Institute Repair Kits

- (2) Type C (Tank Cars) Tank Car Loading Platform
- (1) Type B (Cylinders) First Floor - Chlorine Production

Oil Absorbents

- Fire Perl Absorbent - 10 bags (Storeroom)
- Sorbent Blanket - 2 rolls (Storeroom)
- Hi-Dri (various locations throughout the Plant)

South Chute - Waste Cell Bath

Shovels and brooms are located in the Day Service Area.

Fire Extinguishers

Fire extinguishers including salt and soda ash are located at specific locations throughout the Plant.

New Burning Room

Shovels, salt or soda ash will be located in the New Shop Wash Tank Area.

Coordination
Agreement*RMI Company*RICHARD J. GERARDY
VICE PRESIDENT - ENGINEERINGP. O. BOX 269
1000 WARREN AVENUE
NILES, OHIO 44446
216/652-9951 TWX 810-438-2000

September 4, 1985

Chief Charles Mosier
City of Ashtabula Fire Department
4326 Main Avenue
Ashtabula, Ohio 44004

Dear Sir:

RMI Company has three plants in Ashtabula, Ohio:

- (a.) RMI Company - Sodium Plant
State Road at East 6th Street
Product: Manufacturer of sodium and chlorine by
Downs Electrolytic Process.
- (b.) RMI Company - Metals Reduction Plant
East 21st Street & State Road
Product: Manufactures titanium sponge.
- (c.) RMI Company - Extrusion Plant
East 21st Street
Product: Hot forming by extrusion; most common
metals - uranium, copper.

RMI Company generates hazardous waste at all three plants. In order to comply with environmental requirements given in 40CFR § 264-52(c), RMI needs written agreements with local emergency agencies so that appropriate services are assured in case of a problem.

Each facility has a Crisis Management Plan to follow in case of severe emergencies, and in certain circumstances firefighting services will be necessary. Upon acknowledgement of the availability of service, a copy of each Crisis Plan will be placed on file with your organization.

If you have any questions or need additional information, please call Joe Holman at (216) 652-9951.

Very truly yours,

***RMI Company***RICHARD J. GERARDY
VICE PRESIDENT - ENGINEERINGP. O. BOX 269
1000 WARREN AVENUE
NILES, OHIO 44446
216/652-9951 TWX 810-436-2800

September 4, 1985

Chief Michael Fitchet
Ashtabula Township Fire Department
2718 North Ridge East
Ashtabula, Ohio 44004

Dear Sir:

RMI Company has three plants in Ashtabula, Ohio:

- (a.) RMI Company - Sodium Plant
State Road at East 6th Street
Product: Manufacturer of sodium and chlorine by
Downs Electrolytic Process.
- (b.) RMI Company - Metals Reduction Plant
East 21st Street & State Road
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If you have any questions or need additional information, please call Joe Holman at (216) 652-9951.

Very truly yours,

*RMI Company*

RICHARD J. GERARDY
VICE PRESIDENT - ENGINEERING

P. O. BOX 269
1000 WARREN AVENUE
NILES, OHIO 44448
216/652-9951 TWX 810-436-2600

September 4, 1985

Lt. J. M. Smith, Post Commander
State Highway Patrol
4860 North Ridge West
Ashtabula, Ohio 44004

Dear Sir:

RMI Company has three plants in Ashtabula, Ohio:

- (a.) RMI Company - Sodium Plant
State Road at East 6th Street
Product: Manufacturer of sodium and chlorine by
Downs Electrolytic Process.
- (b.) RMI Company - Metals Reduction Plant
East 21st Street & State Road
Product: Manufactures titanium sponge.
- (c.) RMI Company - Extrusion Plant
East 21st Street
Product: Hot forming by extrusion; most common
metals - uranium, copper.

RMI Company generates hazardous waste at all three plants. In order to comply with environmental requirements given in 40CFR § 264-52(c), RMI needs written agreements with local emergency agencies so that appropriate services are assured in case of a problem.

Each facility has a Crisis Management Plan to follow in case of severe emergencies, and in certain circumstances law enforcement services will be necessary. Upon acknowledgement of the availability of service, a copy of each Crisis Plan will be placed on file with your organization.

If you have any questions or need additional information, please call Joe Holman at (216) 652-9951.

Very truly yours,

G-28a
STATE HIGHWAY PATROL

Revised 3-21-86

STATE OF OHIO
Richard F. Celeste
Governor

Exhibit G-5A
DEPARTMENT OF HIGHWAY SAFETY
William M. Denihan
Director



FILE NO 4-2-180

Colonel Jack Walsh
Superintendent

Ashtabula, Ohio 44004
October 11, 1985

Mr. Richard J. Gerardy
RMI Company
P. O. Box 269
1000 Warren Avenue
Niles, Ohio 44446

Dear Mr. Gerardy:

I am writing in reference to your letter dated September 4, 1985.
All three of the plants mentioned in your letter are located in
Ashtabula Township.

The Ohio Revised Code gives the State Highway Patrol the responsibility
to regulate the movement of traffic on the roads and highways of this
state.

You can be assured that the services of the State Highway Patrol will
be available if a problem should arise at any of your three plants
in Ashtabula Township.

Please understand that Ohio statute gives the State Highway Patrol no
authority on private property and that our services will be restricted
to those with which we have statutory authority to provide.

Yours very truly,

A handwritten signature in dark ink, appearing to read "J. M. Smith".
Lieutenant J. M. Smith
Ashtabula Post Commander

*RMI Company*

RICHARD J. GERARDY
VICE PRESIDENT - ENGINEERING

P. O. BOX 269
1000 WARREN AVENUE
NILES, OHIO 44448
216/652-9951 TWX 810-436-2600

September 4, 1985

Sheriff William Johnston
Sheriff's Department
25 West Jefferson
Jefferson, Ohio 44047

Dear Sir:

RMI Company has three plants in Ashtabula, Ohio:

- (a.) RMI Company - Sodium Plant
State Road at East 6th Street
Product: Manufacturer of sodium and chlorine by
Downs Electrolytic Process.
- (b.) RMI Company - Metals Reduction Plant
East 21st Street & State Road
Product: Manufactures titanium sponge.
- (c.) RMI Company - Extrusion Plant
East 21st Street
Product: Hot forming by extrusion; most common
metals - uranium, copper.

RMI Company generates hazardous waste at all three plants. In order to comply with environmental requirements given in 40CFR § 264-52(c), RMI needs written agreements with local emergency agencies so that appropriate services are assured in case of a problem.

Each facility has a Crisis Management Plan to follow in case of severe emergencies, and in certain circumstances law enforcement services will be necessary. Upon acknowledgement of the availability of service, a copy of each Crisis Plan will be placed on file with your organization.

If you have any questions or need additional information, please call Joe Holman at (216) 652-9951.

Very truly yours,

A handwritten signature in cursive script, appearing to read "R. J. Gerardy", written in dark ink.

**RMI Company**RICHARD J GERARDY
VICE PRESIDENT - ENGINEERINGP. O. BOX 269
1000 WARREN AVENUE
MILES, OHIO 44446
216/652-9951 TWX 810-436-2800

September 4, 1985

Mr. Leonard Forinash
Vice President
Support Services
Ashtabula County Medical Center
2420 Lake Avenue
Ashtabula, Ohio 44004

Dear Sir:

RMI Company has three plants in Ashtabula, Ohio:

- (a.) RMI Company - Sodium Plant
State Road at East 6th Street
Product: Manufacturer of sodium and chlorine by
Downs Electrolytic Process.
- (b.) RMI Company - Metals Reduction Plant
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metals - uranium, copper.

RMI Company generates hazardous waste at all three plants. In order to comply with environmental requirements given in 40CFR§ 264-52(c), RMI needs written agreements with local emergency agencies so that appropriate services are assured in case of a problem.

Each facility has a Crisis Management Plan to follow in case of severe emergencies, and in certain circumstances medical services will be necessary. Upon acknowledgement of the availability of service, a copy of each Crisis Plan will be placed on file with your organization.

If you have any questions or need additional information, please call Joe Holman at (216) 652-9951.

Very truly yours,

A handwritten signature in cursive script, appearing to read "R. J. Gerardy".

**RMI Company**RICHARD J. GERARDY
VICE PRESIDENT - ENGINEERINGP. O. BOX 269
1000 WARREN AVENUE
MILES, OHIO 44446
216/652-9951 TWX 810-436-2600

September 4, 1985

Mr. K. Michael Wheeler, Director
Emergency Management Agency
25 West Jefferson
Jefferson, Ohio 44047

Dear Sir:

RMI Company has three plants in Ashtabula, Ohio:

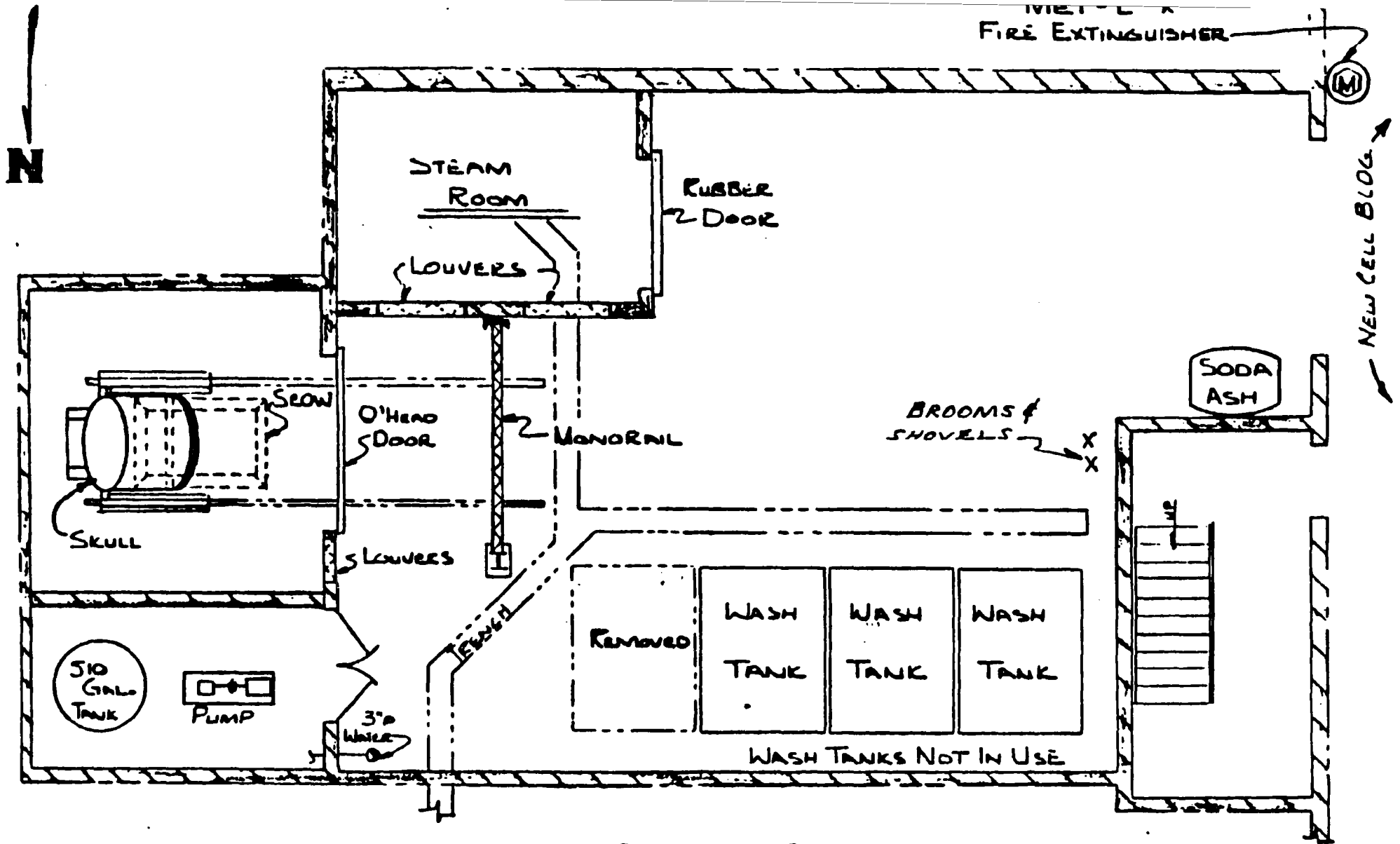
- (a.) RMI Company - Sodium Plant
State Road at East 6th Street
Product: Manufacturer of sodium and chlorine by
Downs Electrolytic Process.
- (b.) RMI Company - Metals Reduction Plant
East 21st Street & State Road
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Each facility has a Crisis Management Plan to follow in case of severe emergencies, and in certain circumstances emergency coordination service will be necessary. Upon acknowledgement of the availability of service, a copy of each Crisis Plan will be placed on file with your organization.

If you have any questions or need additional information, please call Joe Holman at (216) 652-9951.

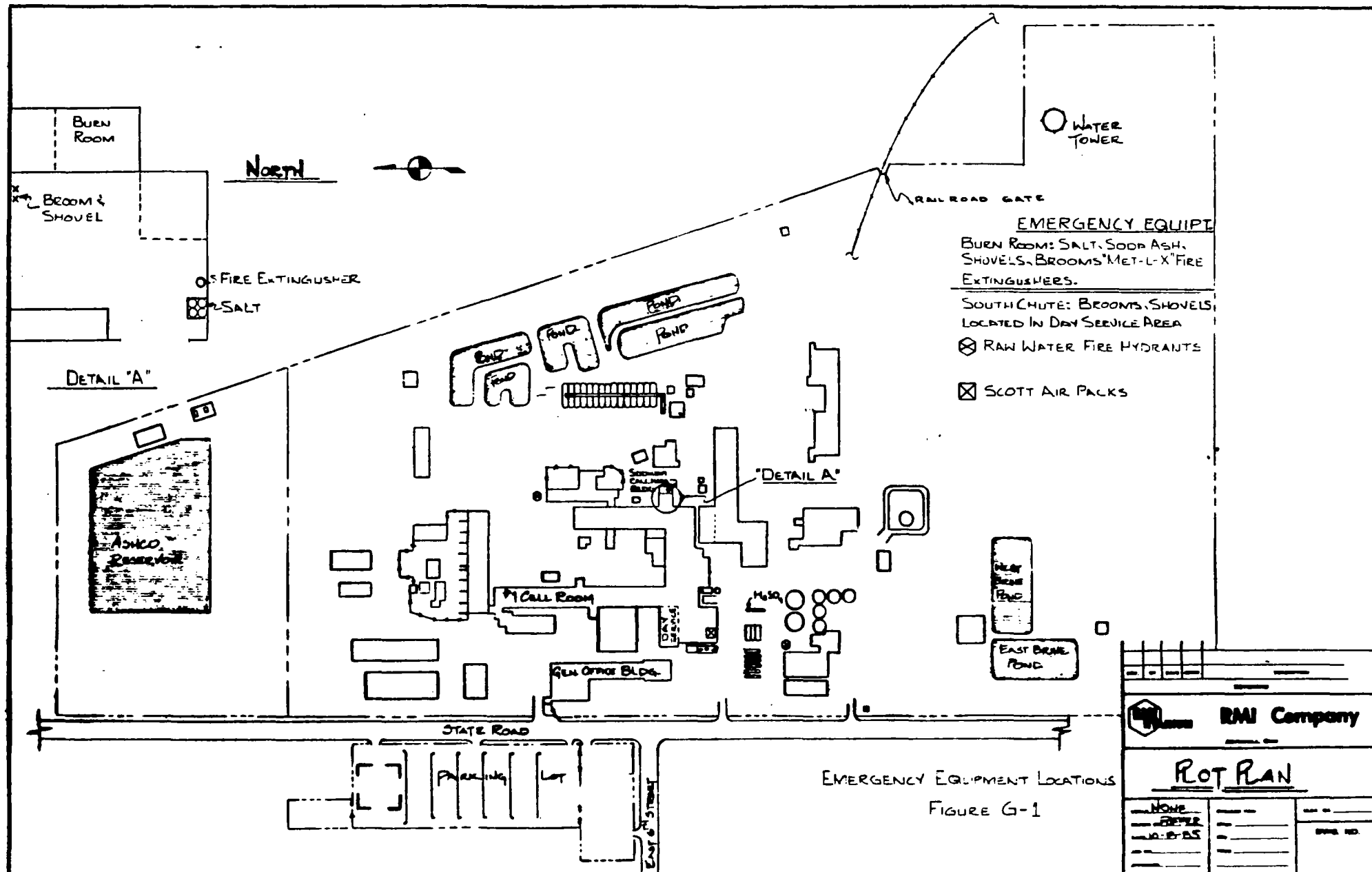
Very truly yours,



NOTE: SCOTT AIR PACK LOCATED IN
THE EVAPORATOR BUILDING
APPR. 100' AWAY

		<h1>RMI Company</h1>			
		ASHTABULA, OHIO			
DWG. NO. FIGURE G-1-A		CHECKED	TP	3-86	JOB NO. SPCC
		APPROVED			BLDG. NO.

Revised 8-20-86



North



WATER TOWER

RAILROAD GATE

"KEY"

(I)	INTERNAL PHONE
(E)	OUTSIDE PHONE
(A)	EVACUATION ALARM 223 OFFICE

MORTON OFFICE

(I) (E)

(I) (E) EVAP OFFICE

(A) 223

PI Call Room

Gen Office Bldg.

EAST BRIDGE POND

STATE ROAD

PARKING

LOT

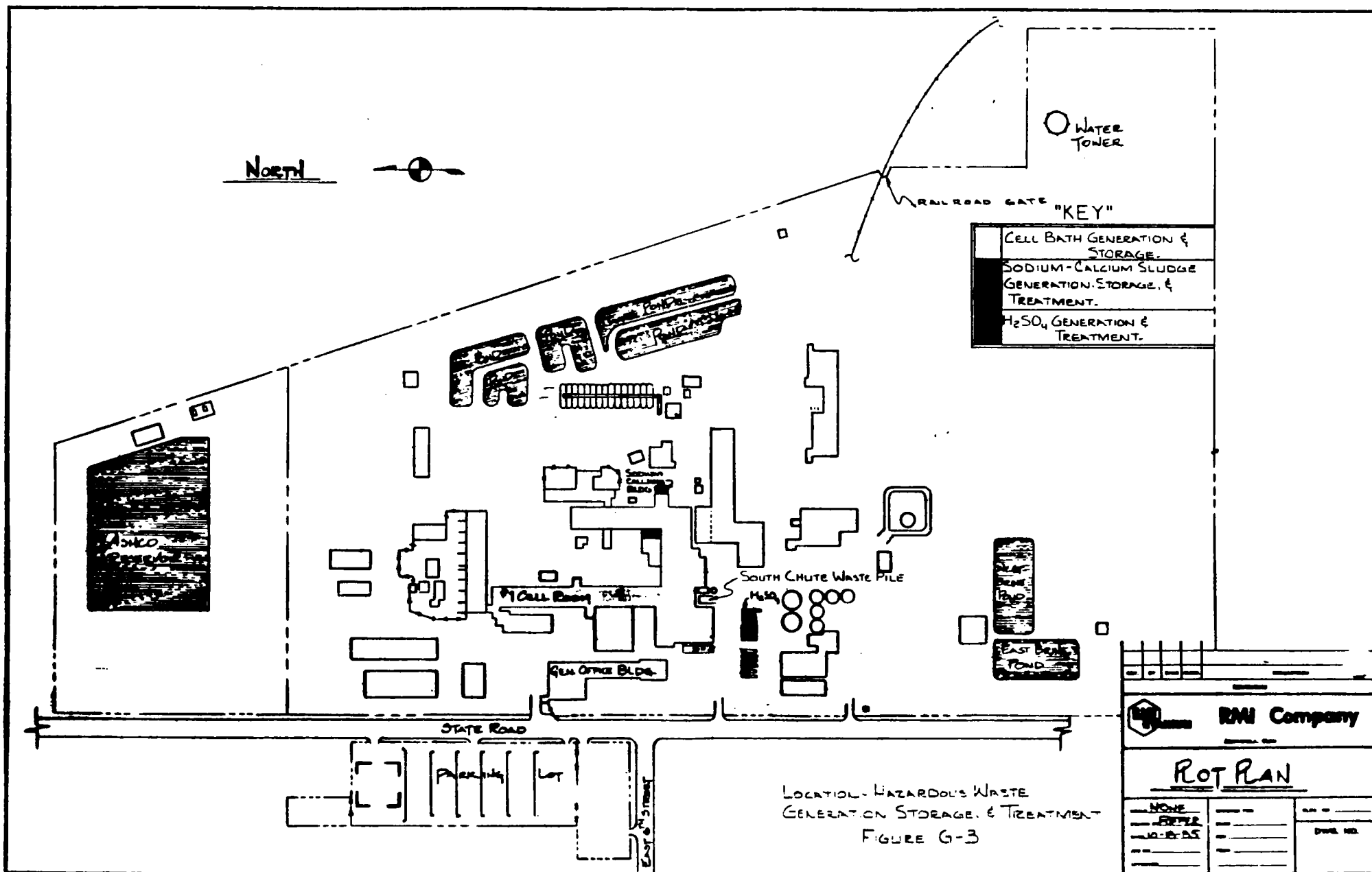
EAST STREET

EMERGENCY TELEPHONES
FIGURE G-2

RMI Company

ROT PLAN

NAME	DATE	DATE
PETER		
10-8-85		
		OWE NO



North



WATER TOWER

RAILROAD GATE

EMERGENCY (REFUGE)
ASSEMBLY AREAS

①	PREVAILING WIND FROM NORTH	1-30 SEC. HORN BLAST & 1-1 SEC. BLAST
②	" " " WEST	1-30 SEC. HORN BU & 2-1 SEC. BLASTS
③	" " " EAST OR SOUTH	1-30 SEC. HORN BLAST & 3-1 SEC. BLASTS

STEAM DRIVEN ALARM
IN BOILER HOUSE (ACTUATED IN 223
OFFICE)

①

③

STATE ROAD

PARKING LOT

②

EAST STREET

EMERGENCY (REFUGE)
ASSEMBLY AREAS
FIGURE G-4



RMI Company

Plot Plan

NAME	DATE	SCALE
BY		
NO. 10-15		

HAZARDOUS WASTE MANAGEMENT PERMIT
ATTACHMENT VI
CLOSURE PLAN

RMI COMPANY-SODIUM PLANT
U.S. EPA FACILITY I.D. #04D 000810242

CLOSURE PLAN

General Description

RMI Company - Sodium Plant
P.O. Box 550
State Road and East 6th Street
Ashtabula, Ohio 44004
OHD000810242

SIC Codes: 2812 (Manufacture of Chlorine)
2819 (Manufacture of Sodium)

Owned and Operated by:

RMI Company
1000 Warren Avenue
Niles, Ohio 44446

RMI Company, Sodium Plant (RMISP) is located in Ashtabula County, Ohio and owned by RMI Company in Niles, Ohio.

RMISP manufactures sodium and chlorine by the Downs Electrolytic process. Saturated brine from an on-site salt mining well is treated and the water removed by evaporation. The resulting dry purified salt, calcium chloride, and barium chloride is fed to downs electrolytic cells (100 cells at capacity). The salt mixture (bath) is maintained in a molten state. Metallic sodium and gaseous chlorine is generated by electrolysis. The chlorine is purified, liquefied and stored on site. The sodium is maintained in liquid form and filtered (to remove calcium) prior to storage and solidification.

RMISP generates three hazardous wastes: (1.) sulfuric acid (corrosive), (2.) cell bath (containing barium, cadmium, and lead), (3.) and sodium/calcium sludge (reactive).

The cell bath waste is temporarily stored on-site in a waste pile prior to shipment off-site for disposal. The waste acid is neutralized on-site with lime. The sodium and sodium/calcium sludge is treated on-site by thermal oxidation.

I CLOSURE AND POST-CLOSURE REQUIREMENTS

I-1 Closure Plans

Basis and description of the closure plans for the thermal oxidation facility and the waste pile are given in this section.

I-1a Partial Closure

No partial closure is planned.

I-1b Final Closure

Closure is expected in the year 2014.

I-1c Maximum Waste Inventory

Maximum quantity of cell bath waste in inventory will be 40 cubic yards.

During normal operations, no more than 10,000 lbs. of sodium/calcium wastes will be in inventory. At closure 100,000 lbs. of waste may accumulate.

I-1d Closure Performance Standard

This closure plan was designed to ensure that the facility will not require further maintenance and controls; to minimize or eliminate threat to human health or the environment; and to avoid escape of hazardous wastes, hazardous waste constituents, leachate, or waste decomposition products to the ground or surface waters or to the atmosphere.

The burning room will remain in operation until completion of permanent plant shut down. Thus all waste sodium and sodium/calcium residue generated by tank cleaning, dismantling of piping, dismantling of sodium cells, and etc. will be treated by thermal oxidation at the burning room.

After the plant has been decontaminated and decommissioned, the burning room will be closed in the following manner:

1. All sodium and calcium will have been oxidized prior to closure, therefore decontamination will be limited to washing the walls, door, ceiling, floor, ductwork, fan, and stack with water. The air quality control system will be flushed to remove any caustic residue.
2. The facility will be inspected to assure that water coming in contact with the various surfaces will not increase in pH above 12.
3. The fan will be removed from the burning facility in order to render the system inoperable.

The final rinsewater will be sampled and analyzed for barium, cadmium, and lead. The process of washing the steel plate and testing the final rinsewater will be repeated until the concentrations of these parameters in the final rinsewater are below the following levels:

<u>Parameter</u>	<u>Decontamination Level</u>	<u>SW-846 Test Method</u>
Barium	1.0 mg/l	7080, 7081
Cadmium	0.5 mg/l	7090, 7091
Lead	0.01 mg/l	7420, 7421

I-1d(3) Closure of Waste Pile

The waste pile will be closed in accordance with the methods described below.

The south chute (waste pile) will remain in operation until all cell bath waste has been removed from the site after final closure of the plant. Since the south chute is an "indoor dry pile", all of the material can be easily removed. The area will be swept and brushed clean of excess residue; with all collected residue being placed in the last roll-off container containing cell bath waste. The sheet metal siding will be removed and any residue found between the waste pile wall and the outside wall will be swept up and placed in the roll-off container for offsite shipment to a hazardous waste facility for disposal.

The metal floor will be removed, decontaminated and discarded. All solid materials collected from decontaminating the steel floor or concrete sub-floor will be placed in the roll-off. A six inch asphalt dike will be constructed around the perimeter of the former waste pile. The dismantled waste pile and surrounding area will then be washed down. Samples of the wash and rinse water will be analyzed for barium, lead and cadmium. If the wash and/or rinse waters contain less than 10.0 mg/l barium, 0.5 mg/l lead and 0.1 mg/l cadmium they will be discharged through the plant's wastewater treatment facility. If any of the parameters are greater than the concentrations listed above, the wash and/or rinse waters will be bulk packaged for offsite shipment to a hazardous waste facility for disposition.

I-2(a)

The final rinsewater will be sampled and analyzed for barium, cadmium, and lead. The process of washing the steel plate and testing the final rinsewater will be repeated until the concentrations of these parameters in the final rinsewater are below the following levels:

<u>Parameter</u>	<u>Decontamination Level</u>	<u>SW-846 Test Method</u>
Barium	1.0 mg/l	7080, 7081
Cadmium	0.5 mg/l	7090, 7091
Lead	0.01 mg/l	7420, 7421

At the time of closure, the steel plate, concrete and/or asphalt will be visually examined for cracks or signs of deterioration that could allow hazardous constituents to be released to the soil. If such deterioration is found, then soil samples will be taken and analyzed from the area of concern. A minimum of four background soil samples from the same soil horizon, but from an area unaffected by the operations of the facility, will be taken and analyzed for comparison. Each of these soil samples will be analyzed for barium, cadmium and lead using the SW-846 test methods identified above. If the soil samples are found to contain concentrations of these constituents that are statistically significant in comparison to the background concentrations, then at least six inches of soil shall be removed from the area in question, and the soil to be left in place will be sampled and tested. This process will be repeated until all contaminated soil is removed.

I-1d(6)(a) Continuance of Treatment

The "south chute" will be maintained as an indoor dry pile until all cell bath waste has been removed from the site.

The thermal oxidation unit with its air quality control system, and auxiliary equipment will be maintained until all sodium/calcium wastes are treated.

The acid neutralization (chlorine burning) unit and wastewater treatment facility will also be maintained until all waste has been properly disposed.

I-1d(6)(b) Vegetative Cover --- Not Applicable.

I-1e Closure of Disposal Units --- Not Applicable.

I-1f Schedule for Closure

As noted in I-1d above, the burning room and waste pile will remain in operation until all cell bath waste and sodium/calcium sludge have been removed from the plant. Decommissioning of the plant should take less than two years.

The proposed schedule for closure of the burning room and waste pile is provided in Table I-1. Closure will be initiated 180 days after notice to the State of Ohio. Final waste removal will begin after this notice period has expired. Facility decontamination and rinse water sampling will follow the removal of waste inventory. Note that the schedule allows for a "worst case" requirement for a second cleaning.

Date of final closure is set for 2014.

I-1g Extension for Closure Time --- Not Requested.

I-2 Post-Closure Plan --- Not Applicable.

I-3 Notice of Deed --- Not Applicable.

I-4 Closure Cost Estimate

The greatest cost associated with closure would be experienced if the plant was shut down while production was at capacity - 100 electrolytic cells in operation. The following is closure cost related to hazardous waste treatment and disposal in 1985 dollars.

Cell Bath Waste

Pump and dismantle 100 cells	\$132,000
Hauling cost	80,000
Supervision and handling	40,000
Nitrogen and miscellaneous costs	<u>48,000</u>
Total Cell Bath	\$300,000

Sodium

Dismantle and burn 100 containers	\$ 100,000
Dismantle and burn 100 receivers	30,000
Dismantle and burn filters	30,000
Clean 30 storage tanks and burn sodium	400,000
Clean 37 railroad cars and burn sodium	200,000
Dismantle piping and valves and burn sodium	200,000
Supervision and handling 14 people 2 years	<u>500,000</u>
Total Sodium	\$ 1,460,000

Settling Ponds

Remove material and fill area	\$ 300,000
Total	\$ 2,060,000
Contingency 30%	640,000
	\$ 2,700,000

I-5 Financial Assurance Mechanism for Closure

The RMISP is using financial test and corporate guarantee for closure as the mechanism for establishing financial assurance.

I-5e Financial Test and Corporate Guarantee for Closure

In fulfillment of this portion of the permit application, the following documents are submitted:

Exhibit I-1: Letter from Vice President and Comptroller of RMI Company to the Ohio EPA in support of RMI's use of the financial test to demonstrate financial assurance.

Exhibit I-2: Auditor's opinion of RMI Company's Consolidated Balance Sheet for the year ending December 31, 1984.

Exhibit I-3: RMI Company's consolidated Financial Statements for the years ended December 31, 1984 and December 31, 1983.

REQUEST FOR CONFIDENTIALITY: The information submitted in Exhibits I-1, I-2, and I-3 are CONFIDENTIAL.

I-6 Post-Closure Cost Estimate --- Not Applicable.

I-7 Financial Assurance Mechanism for Post-Closure Care --- Not Applicable

I-8 Liability Requirements

Historically, RMI Company has purchased sudden and accidental liability insurance which covered nonwillful releases of pollutants to the environment. However such coverage has recently become unavailable. Therefore the Financial Test for Liability Coverage will be used in 1986.

I-8a(2) Financial Test for Liability Coverage

In fulfillment of this portion of the permit application, the following documents are submitted:

Exhibit I-2: Auditor's opinion of RMI Company's Consolidated Balance Sheet for the year ending December 31, 1984.

Exhibit I-3: RMI Company's Consolidated Financial Statements for the years ended December 31, 1984 and December 31, 1983.

Exhibit I-4: Letter from Vice President and Comptroller of RMI Company to the U. S. Environmental Protection Agency in support of RMI's use of the financial test to demonstrate both assurance for closure and liability coverage.

I-8b Coverage for Nonsudden Accidental Occurrences --- Not Applicable

I-9a Use of State Required Mechanism --- Not Applicable

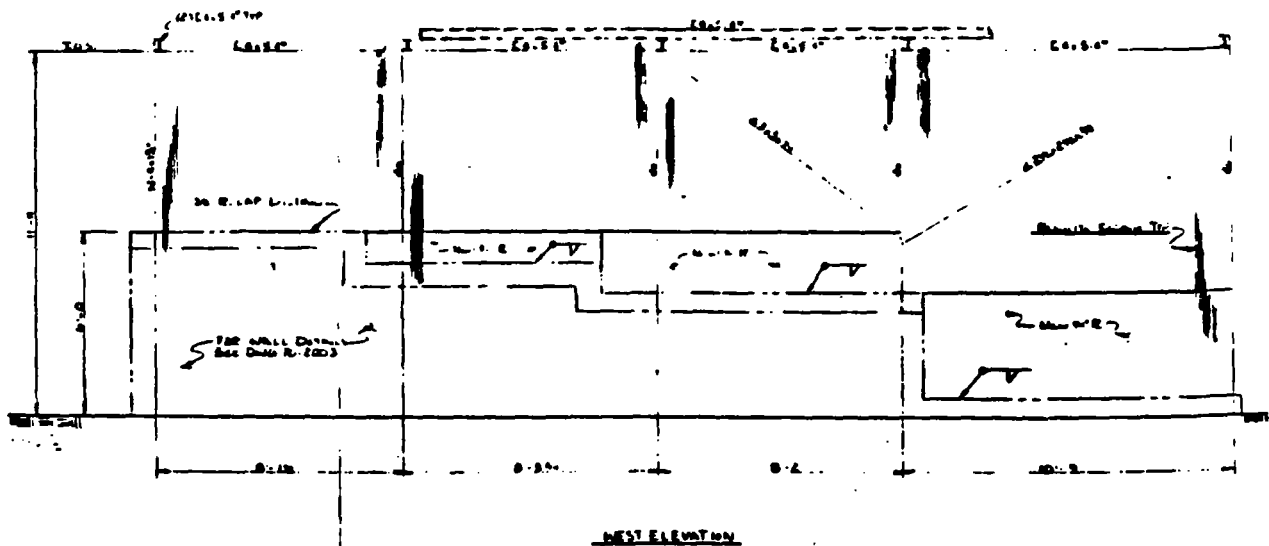
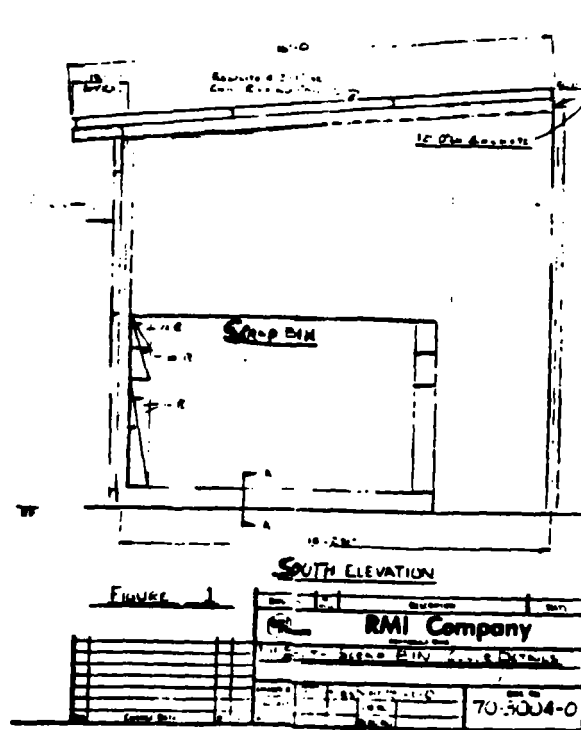
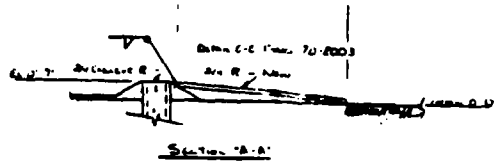
TABLE I-1. CLOSURE SCHEDULE FOR THE THERMAL OXIDATION FACILITY AND WASTE PILE

	<u>Days</u>
o Notify Ohio Environmental Protection Agency of intent to initiate closure	-180
o Initiate Closure	0
o Remove waste inventory, load and transfer	10
o Decontaminate building	40
o Rinse water sampling	50
o Analyze samples and results	70
o Decontaminate equipment	80
o RMI Company and independent Professional Engineer certify closure	110
or	
o Repeat building decontamination, rinse water sampling, and sample analysis prior to decontamination of equipment	150
o RMI Company and independent Professional Engineer certify closure	180

HAZARDOUS WASTE MANAGEMENT PERMIT
ATTACHMENT VII
WASTE PILE DESIGN

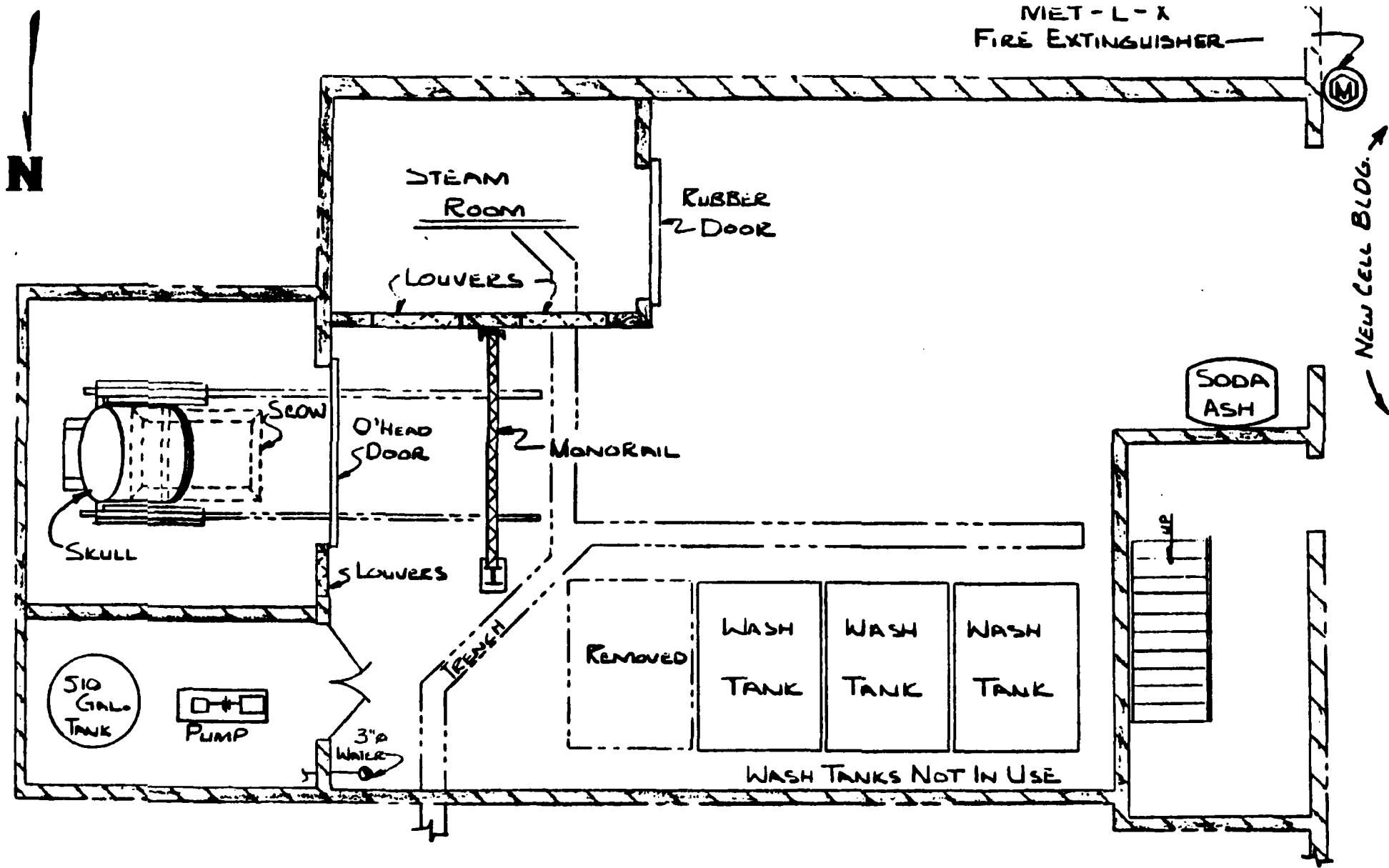
RMI COMPANY-SODIUM PLANT
U.S. EPA FACILITY I.D. #OHD 000810242


WASTE PILE DESIGN



HAZARDOUS WASTE MANAGEMENT PERMIT
ATTACHMENT VIII
INCINERATOR (BURNING ROOM) DESIGN

RMI COMPANY-SODIUM PLANT
U.S. EPA FACILITY I.D. #OHD 000810242



		RMI Company ASHTABULA, OHIO			
DWG. NO. FIGURE G-1-A	CHECKED APPROVED	TP 3-86	JOB NO. SPCC	BLDG. NO.	

HAZARDOUS WASTE MANAGEMENT PERMIT
ATTACHMENT IX
LIST OF SOLID WASTE MANAGEMENT UNITS

RMI COMPANY-SODIUM PLANT
U.S. EPA FACILITY I.D. #OHD 000810242

VISUAL SITE INSPECTION REPORT: LIST OF SOLID WASTE MANAGEMENT UNITS

<u>Solid Waste Management Unit</u>	<u>Release</u>
Closed landfill	Leachate observed at landfill surface; unknown if hazardous constituents have escaped from landfill surface. Groundwater contamination around landfill is documented.
Bare area near cooling tower	Unknown
Five wastewater treatment ponds	Mild chlorine odor present around ponds. Permitted discharge to surface waters. Groundwater release unknown.
Pond east of landfill	Unknown
Sulfuric acid neutralization tanks	Surrounded by concrete area. No releases observed.